

Service Occupations: Cleaning, Food, and Personal



Reprinted from the
Occupational Outlook Handbook, 2002-03 Edition

U.S. Department of Labor
Bureau of Labor Statistics

February 2002

Bulletin 2540-10



Occupations Included in this Reprint

Animal care and service workers
Barbers, cosmetologists, and other personal appearance workers
Building cleaning workers
Chefs, cooks, and food preparation workers
Childcare workers
Flight attendants
Food and beverage serving and related workers
Gaming service occupations
Grounds maintenance workers
Personal and home care aides
Pest control workers
Recreation and fitness workers

Animal Care and Service Workers

(O*NET 39-2011.00, 39-2021.00)

Significant Points

- Animal lovers get satisfaction in this occupation, but aspects of the work can be unpleasant and physically and emotionally demanding.
- Most animal care and service workers are trained on the job, but advancement depends on experience, formal training, and continuing education.

Nature of the Work

Many people like animals. But, as pet owners can attest, taking care of them is hard work. Animal care and service workers—which include animal caretakers and animal trainers—train, feed, water, groom, bathe, and exercise animals, and clean, disinfect, and repair their cages. They also play with the animals, provide companionship, and observe behavioral changes that could indicate illness or injury. Boarding kennels, animal shelters, veterinary hospitals and clinics, stables, laboratories, aquariums, and zoological parks all house animals and employ animal care and service workers. Job titles and duties vary by employment setting.

Kennel attendants usually care for small companion animals like dogs and cats while their owners are working or traveling out of town. Beginning attendants perform basic tasks, such as cleaning cages and dog runs, filling food and water dishes, and exercising animals. Experienced attendants may provide basic animal healthcare, as well as bathe animals, trim nails, and attend to other grooming needs. Attendants who work in kennels also may sell pet food and supplies, assist in obedience training, help with breeding, or prepare animals for shipping.

Animal caretakers who specialize in grooming, or maintaining a pet's—usually a dog's or cat's—appearance are called *groomers*. Some groomers work in kennels, veterinary clinics, animal shelters, or pet-supply stores. Others operate their own grooming business. Groomers answer telephones, schedule appointments, discuss with clients their pets' grooming needs, and collect information on the pet's disposition and its veterinarian. Groomers often are the first to notice a medical problem, such as an ear or skin infection, that requires veterinary care.

Grooming the pet involves several steps: An initial brush-out is followed by a first clipping of hair or fur using electric clippers, combs, and grooming shears; the groomer then cuts the nails, cleans the ears, bathes, and blow-dries the animal, and ends with a final clipping and styling.

Animal caretakers in animal shelters perform a variety of duties and work with a wide variety of animals. In addition to attending to the basic needs of the animals, caretakers also must keep records of the animals received and discharged and any tests or treatments done. Some vaccinate newly admitted animals under the direction of a veterinarian or veterinary technician, and euthanize (painlessly put to death) seriously ill, severely injured, or unwanted animals. Animal caretakers in animal shelters also interact with the public, answering telephone inquiries, screening applicants for animal adoption, or educating visitors on neutering and other animal health issues.

Caretakers in stables are called *grooms*. They saddle and unsaddle horses, give them rubdowns, and walk them to cool-off after a ride. They also feed, groom, and exercise the horses; clean out stalls and replenish bedding; polish saddles; clean and organize the tack (harness, saddle, and bridle) room; and store supplies and feed. Experienced grooms may help train horses.



Animals have to be fed every day, so animal care and service workers often work weekend and holiday shifts.

In zoos, animal care and service workers, called *keepers*, prepare the diets and clean the enclosures of animals, and sometimes assist in raising them when they are very young. They watch for any signs of illness or injury, monitor eating patterns or any changes in behavior, and record their observations. Keepers also may answer questions and ensure that the visiting public behaves responsibly toward the exhibited animals. Depending on the zoo, keepers may be assigned to work with a broad group of animals such as mammals, birds, or reptiles, or they may work with a limited collection of animals such as primates, large cats, or small mammals.

Animal trainers train animals for riding, security, performance, obedience, or assisting persons with disabilities. Animal trainers do this by accustoming the animal to human voice and contact, and conditioning the animal to respond to commands. Trainers use several techniques to help them train animals. One technique, known as a bridge, is a stimulus that a trainer uses to communicate the precise moment an animal does something correctly. When the animal responds correctly, the trainer gives positive reinforcement in a variety of ways: food, toys, play, rubdowns, or speaking the word "good." Animal training takes place in small steps, and often takes months and even years of repetition. During the conditioning process, trainers provide animals mental stimulation, physical exercise, and husbandry care. In addition to their hands-on work with the animals, trainers often oversee other aspects of the animal's care, such as diet preparation. Trainers often work in competitions or shows, such as the circus or marine parks. Trainers who work in shows also may participate in educational programs for visitors and guests.

Working Conditions

People who love animals get satisfaction from working with and helping them. However, some of the work may be unpleasant, as well as physically and emotionally demanding, and sometimes dangerous. Most animal care and service workers have to clean animal cages and lift, hold, or restrain animals, risking exposure to bites or scratches. Their work often involves kneeling, crawling, repeated bending, and lifting heavy supplies like bales of hay or bags of feed. Animal caretakers must take precautions when treating animals with germicides or insecticides. The work setting can be noisy. Caretakers of show and sports animals travel to competitions.

Animal care and service workers who witness abused animals or who assist in the euthanizing of unwanted, aged, or hopelessly injured animals may experience emotional stress. Those working

for private humane societies and municipal animal shelters often deal with the public, some of whom might react with hostility to any implication that the owners are neglecting or abusing their pets. Such workers must maintain a calm and professional demeanor while they enforce the laws regarding animal care.

Animal care and service workers may work outdoors in all kinds of weather. Hours are irregular: Animals have to be fed every day, so caretakers often work weekend and holiday shifts. In some animal hospitals, research facilities, and animal shelters, an attendant is on duty 24 hours a day, which means night shifts. The majority of full-time animal care and service workers work about 40 hours a week.

Employment

Animal care and service workers held a total of 145,000 jobs in 2000. Nearly 90 percent of this number worked as nonfarm animal caretakers; the remainder worked as animal trainers. Nonfarm animal caretakers worked primarily in boarding kennels, animal shelters, stables, grooming shops, animal hospitals, and veterinary offices. A significant number also worked for animal humane societies, racing stables, dog and horse racetrack operators, zoos, theme parks, circuses, and other amusement and recreations services. In 2000, more than 1 out of every 4 nonfarm animal caretakers was self-employed.

Employment of animal trainers was concentrated in animal services that specialize in training horses, pets, and other animal specialties; and in commercial sports, training racehorses and dogs. About 4 in 10 animal trainers were self-employed.

Training, Other Qualifications, and Advancement

Most animal care and service workers are trained on the job. Employers generally prefer to hire people with some experience with animals. Some training programs are available for specific types of animal caretakers, such as groomers, but formal training is usually not necessary for entry-level positions. Animal trainers often need to possess a high school diploma or GED equivalent. However, some animal training jobs may require a bachelor's degree and additional skills. For example, a marine mammal trainer usually needs a bachelor's degree in biology, marine biology, animal science, psychology, zoology, or related field, plus strong swimming skills and SCUBA certification. All animal trainers need patience, sensitivity, and experience with problem-solving and obedience. Certification is not mandatory for animal trainers, but several organizations offer training programs and certification for prospective animal trainers.

Most pet groomers learn their trade by completing an informal apprenticeship, usually lasting 6 to 10 weeks, under the guidance of an experienced groomer. Prospective groomers may also attend one of the 50 State-licensed grooming schools throughout the country, with programs varying in length from 4 to 18 weeks. The National Dog Groomers Association of America certifies groomers who pass a written examination consisting of 400 questions, with a separate part testing practical skills. Beginning groomers often start by taking on one duty, such as bathing and drying the pet. They eventually assume responsibility for the entire grooming process, from the initial brush-out to the final clipping. Groomers who work in large retail establishments or kennels may, with experience, move into supervisory or managerial positions. Experienced groomers often choose to open their own shops.

Beginning animal caretakers in kennels learn on the job, and usually start by cleaning cages and feeding and watering animals. Kennel caretakers may be promoted to kennel supervisor, assistant manager, and manager, and those with enough capital and experience may open up their own kennels. The American Boarding

Kennels Association (ABKA) offers a 3-stage, home-study program for individuals interested in pet care. The first two study programs address basic and advanced principles of animal care, while the third program focuses on in-depth animal care and good business procedures. Those who complete the third program and pass oral and written examinations administered by the ABKA become Certified Kennel Operators (CKO).

Some zoological parks may require their caretakers to have a bachelor's degree in biology, animal science, or a related field. Most require experience with animals, preferably as a volunteer or paid keeper in a zoo. Zookeepers may advance to senior keeper, assistant head keeper, head keeper, and assistant curator, but few openings occur, especially for the higher-level positions.

Animal caretakers in animal shelters are not required to have any specialized training, but training programs and workshops are increasingly available through the Humane Society of the United States, the American Humane Association, and the National Animal Control Association. Workshop topics include cruelty investigations, appropriate methods of euthanasia for shelter animals, and techniques for preventing problems with wildlife. With experience and additional training, caretakers in animal shelters may become adoption coordinators, animal control officers, emergency rescue drivers, assistant shelter managers, or shelter directors.

Job Outlook

Employment of animal care and service workers is expected to grow faster than the average for all occupations through 2010. The pet population—which drives employment of animal caretakers in kennels, grooming shops, animal shelters, and veterinary clinics and hospitals—is expected to remain stable or slightly increase. Pets remain popular and pet owners—including a large number of baby boomers whose disposable income is expected to increase as they age—may increasingly take advantage of grooming services, daily and overnight boarding services, training services, and veterinary services, spurring employment growth for animal caretakers, veterinary assistants, and animal trainers.

Demand for animal care and service workers in animal shelters is expected to remain steady. Communities are increasingly recognizing the connection between animal abuse and abuse toward humans, and should continue to commit funds to animal shelters, many of which are working hand-in-hand with social service agencies and law enforcement teams. Employment growth of personal and group animal trainers will stem from an increased number of animal owners seeking training services for their pets, including behavior modification and feline behavior training. The outlook for caretakers in zoos, however, is not favorable due to slow growth in zoo capacity and keen competition for the few positions.

Despite growth in demand for animal care and service workers, the overwhelming majority of jobs will result from the need to replace workers leaving the field. Many animal caretaker jobs that require little or no training have work schedules that tend to be flexible; therefore, they are attractive to people seeking their first job and for students and others looking for temporary or part-time work. Because many workers leave the occupation, the overall availability of jobs should be very good.

Earnings

Median hourly earnings of nonfarm animal caretakers were \$7.67 in 2000. The middle 50 percent earned between \$6.48 and \$9.59. The bottom 10 percent earned less than \$5.78, and the top 10 percent earned more than \$12.70. Median hourly earnings in the industries employing the largest numbers of nonfarm animal caretakers in 2000 were as follows:

Local government	\$11.80
Commercial sports	8.09
Animal services, except veterinary	7.78
Retail stores, not elsewhere classified	7.32
Membership organizations, not elsewhere classified	7.18
Veterinary services	7.07

Median hourly earnings of animal trainers were \$10.54 in 2000. The middle 50 percent earned between \$7.59 and \$16.19. The lowest 10 percent earned less than \$6.25, and the top 10 percent earned more than \$20.85.

Related Occupations

Others who work extensively with animals include farmers, ranchers, and agricultural managers; agricultural workers; veterinarians; veterinary technologists, technicians, and assistants; and biological medical scientists.

Sources of Additional Information

For more information on jobs in animal caretaking and control, and the animal shelter and control personnel training program, write to:

- The Humane Society of the United States, 2100 L St. NW., Washington, DC 20037-1598. Internet: <http://www.hsus.org>

For career information and information on training, certification, and earnings of animal control officers at Federal, State, and local levels, contact:

- National Animal Control Association, P.O. Box 480851, Kansas City, MO 64148-0851. Internet: <http://www.nacanet.org>

To obtain a listing of State-licensed grooming schools, send a stamped, self-addressed, business size envelope to:

- National Dog Groomers Association of America, P.O. Box 101, Clark, PA 16113. Internet: <http://www.nauticom.net/www/ndga>

For information on State-licensed grooming schools and careers in pet grooming, contact:

- The Madson Group, Inc., Dept. Petgroomer.com, 13775 A Mono Way, Suite #224, Sonoma, CA 95370. Internet: <http://www.petgroomer.com>

Barbers, Cosmetologists, and Other Personal Appearance Workers

(O*NET 39-5011.00, 39-5012.00, 39-5092.00, 39-5093.00, 39-5094.00)

Significant Points

- Job opportunities for cosmetologists should be favorable due to growing demand for cosmetology services.
- Barbers, cosmetologists, and most other personal appearance workers must be licensed.
- Very high proportions of personal appearance workers are self-employed; many also work flexible schedules.

Nature of the Work

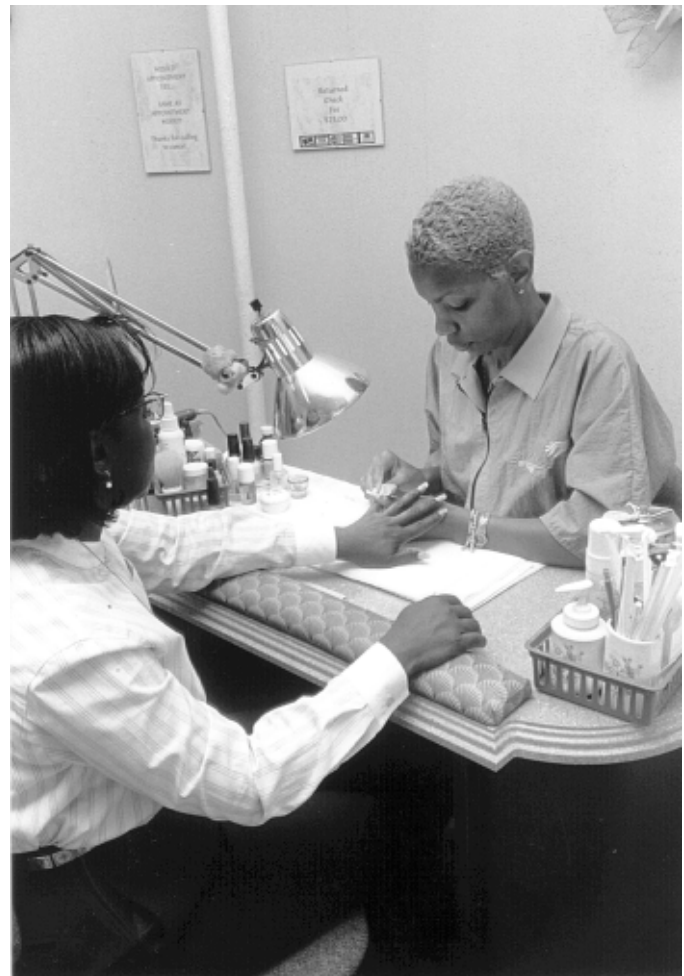
Barbers and cosmetologists, also called *hairdressers* and *hairstylists*, help people look neat and well-groomed. Other personal appearance workers, such as *manicurists* and *pedicurists*, *shampooers*, and *skin care specialists* provide specialized services that help clients look and feel their best.

Barbers cut, trim, shampoo, and style hair. Also, they fit hairpieces, offer scalp treatments and facial massages, and shave male customers. In many States, barbers are licensed to color, bleach, or highlight hair and offer permanent wave services. A growing number of barbers are trained to provide skin care and nail treatments.

Hairdressers, hairstylists, and cosmetologists provide beauty services, such as shampooing, cutting, coloring, and styling hair. They may advise clients on how to care for their hair, straighten or permanent wave hair, or lighten or darken hair color. Additionally, cosmetologists may train to give manicures, pedicures, and scalp and facial treatments; provide makeup analysis; and clean and style wigs and hairpieces.

A growing number of workers offer specialized services. The largest and fastest growing of these are *manicurists* and *pedicurists*, called *nail technicians* in some States. They work exclusively on nails and provide manicures, pedicures, coloring, and nail extensions to clients. Another group of specialists is *skin care specialists*, or *estheticians*, who cleanse and beautify the skin by giving facials, full-body treatments, head and neck massages, and removing hair through waxing. *Electrologists* use an electrolysis machine to remove hair. Finally, *shampooers* specialize in shampooing and conditioning clients' hair in some larger salons.

In addition to their work with clients, personal appearance workers are expected to maintain clean work areas and sanitize all work implements. They may make appointments and keep records of hair color and permanent wave formulas used by their regular clients. A growing number actively sell hair products and other cosmetic supplies. Barbers, cosmetologists, and other personal appearance workers who operate their own salons have managerial duties that include hiring, supervising, and firing workers, as well as keeping business and inventory records, ordering supplies, and arranging for advertising.



Manicurists and pedicurists are the fastest growing cosmetology occupations.

Working Conditions

Barbers, cosmetologists, and other personal appearance workers usually work in clean, pleasant surroundings with good lighting and ventilation. Good health and stamina are important because these workers are on their feet for most of their shift. Because prolonged exposure to some hair and nail chemicals may cause irritation, special care is taken to use protective clothing, such as plastic gloves or aprons.

Most full-time barbers, cosmetologists, and other personal appearance workers put in a 40-hour week, but longer hours are common in this occupation, especially among self-employed workers. Work schedules may include evenings and weekends, when beauty salons and barbershops are busiest. Barbers and cosmetologists generally are busiest on weekends and during lunch and evening hours, therefore they arrange to take breaks during less popular times. Nearly half of all cosmetologists work part time or have variable schedules, double the rate for barbers and for all other workers in the economy.

Employment

Barbers, cosmetologists, and other personal appearance workers held about 790,000 jobs in 2000. Nine out of 10 jobs were for barbers, hairdressers, hairstylists, and cosmetologists. Of the remaining jobs, manicurists and pedicurists held about 40,000; skin care specialists about 21,000; and shampooers about 20,000.

Most of these workers are employed in beauty salons or barber shops, but they are also found in department stores, nursing and other residential care homes, and drug and cosmetics stores. Nearly every town has a barbershop or beauty salon, but employment in this occupation is concentrated in the most populous cities and States.

Approximately half of barbers, cosmetologists, and other personal appearance workers are self-employed. Many own their own salon, but a growing number lease booth space or a chair from the salon's owner.

Training, Other Qualifications, and Advancement

All States require barbers, cosmetologists, and most other personal appearance workers to be licensed by the State in which they work. Qualifications for a license, however, vary. Generally, a person must have graduated from a State-licensed barber or cosmetology school and be at least 16 years old. A few States require applicants to pass a physical examination. Some States require graduation from high school while others require as little as an eighth grade education. In a few States, completion of an apprenticeship can substitute for graduation from a school, but very few barbers or cosmetologists learn their skills in this way. Applicants for a license usually are required to pass a written test and demonstrate an ability to perform basic barbering or cosmetology services.

Some States have reciprocity agreements that allow licensed barbers and cosmetologists to apply for and obtain a license in a different State without additional formal training. Other States do not recognize training or licenses obtained in another State; consequently, persons who wish to work in a particular State should review the laws of that State before entering a training program.

Public and private vocational schools offer daytime or evening classes in barbering and cosmetology. Full-time programs in barbering and cosmetology usually last 9 to 24 months, but training for manicurists and pedicurists, skin care specialists, and electrologists requires significantly less time. An apprenticeship program can last from 1 to 3 years. Shampooers generally do not need formal training or a license. Formal training programs include classroom study, demonstrations, and practical work. Students study the basic services—haircutting, shaving, facial massaging, and hair and scalp treatments—and, under supervision,

practice on customers in school “clinics.” Most schools also teach unisex hairstyling and chemical styling. Students attend lectures on the use and care of instruments, sanitation and hygiene, chemistry, anatomy, physiology, and recognition of simple skin ailments. Instruction also is provided in communication, sales, and general business practices. There are advanced courses for experienced barbers and cosmetologists in hairstyling, coloring, and the sale and service of hairpieces.

After graduating from a training program, students can take the State licensing examination. The examination consists of a written test and, in some cases, a practical test of styling skills based on established performance criteria. A few States include an oral examination in which the applicant is asked to explain the procedures he or she is following while taking the practical test. In many States, cosmetology training may be credited towards a barbering license, and vice versa. A few States combine the two licenses into one hair styling license. Many States require separate licensing examinations for manicurists, pedicurists, and skin care specialists.

For many barbers, cosmetologists, and other personal appearance workers, formal training and a license are only the first steps in a career that requires years of continuing education. Because hairstyles change, new products are developed, and services expand to meet clients' needs, personal appearance workers must keep abreast of the latest fashions and beauty techniques. They attend training at salons, cosmetology schools, or product shows. Through workshops and demonstrations of the latest techniques, industry representatives introduce cosmetologists to a wide range of products and services. As retail sales become an increasingly important part of salons' revenue, the ability to be an effective salesperson becomes vital for salon workers.

Successful personal appearance workers should have an understanding of fashion, art, and technical design. They should enjoy working with the public and be willing and able to follow clients' instructions. Communication, image, and attitude play an important role in career success. Some cosmetology schools consider “people skills” to be such an integral part of the job that they require coursework in this area. Business skills are important for those who plan to operate their own salons.

During their first months on the job, new workers are given relatively simple tasks or are assigned the simpler hairstyling patterns. Once they have demonstrated their skills, they are gradually permitted to perform more complicated tasks such as giving shaves, coloring hair, or applying a permanent. As they continue to work in the field, more training is usually required to learn the techniques used in each salon and to build on the basics learned in cosmetology school.

Advancement usually takes the form of higher earnings as barbers and cosmetologists gain experience and build a steady clientele. Some barbers and cosmetologists manage large salons or open their own after several years of experience. Others teach in barber or cosmetology schools, or provide training through vocational schools. Other options include advancing to sales representatives, image or fashion consultants, or examiners for State licensing boards.

Job Outlook

Overall employment of barbers, cosmetologists, and other personal appearance workers is projected to grow about as fast as the average for all occupations through 2010, because of increasing population, incomes, and demand for cosmetology services. Job opportunities should be favorable, especially because numerous job openings will arise from the need to replace workers who transfer to other occupations, retire, or leave the labor force for other reasons. Competition is expected for jobs and clients at higher paying salons, as applicants vie with a large pool of licensed and

experienced cosmetologists for these positions. The number of self-employed, booth-renting cosmetologists should continue to grow. Opportunities will be better for those licensed to provide a broad range of services.

Employment trends are expected to vary among the different specialties within this grouping. For example, employment of barbers is expected to decline, due to a large number of retirements and the relatively small number of cosmetology school graduates opting to obtain barbering licenses. Employment of hairdressers, hairstylists, and cosmetologists should grow about as fast as average, because of continuing demand for coloring services and other hair treatments, such as perms and waves, by teens and aging baby boomers.

Rapid growth in the number of nail salons and full-service, day spas will generate numerous job openings for other personal appearance workers. Nail salons specialize in providing manicures and pedicures. Day spas typically provide a full range of services, including beauty wraps, manicures and pedicures, facials, and massages. Employment of manicurists and pedicurists is expected to grow faster than the average for all occupations, while skin care specialists and shampooers should expect average employment growth.

Earnings

Barbers, cosmetologists, and other personal appearance workers receive income from a variety of sources. They may receive commissions based on the price of the service or a salary based on number of hours worked. All receive tips and many receive commissions on the products they sell. In addition, some salons pay bonuses to employees who bring in new business.

Median annual earnings in 2000 for salaried hairdressers, hairstylists, and cosmetologists, including tips and commission, were \$17,660. The middle 50 percent earned between \$14,000 and \$23,910. The lowest 10 percent earned less than \$12,280, and the highest 10 percent earned more than \$33,220. Median annual earnings were \$17,620 in beauty shops and \$17,570 in department stores.

Median annual earnings in 2000 for salaried barbers, including tips, were \$17,740. The middle 50 percent earned between \$13,580 and \$24,540. The lowest 10 percent earned less than \$12,030, and the highest 10 percent earned more than \$33,040. Median annual earnings were \$18,330 in beauty shops and \$16,900 in barber shops.

Among others in this group, median annual earnings, including tips, were \$20,080 for skin care specialists; \$15,440 for manicurists and pedicurists; and \$13,690 for shampooers.

A number of factors determine total income for barbers, cosmetologists, and other personal appearance workers, including the size and location of the salon, the number of hours worked, clients' tipping habits, and competition from other barber shops and salons. A cosmetologist's or barber's initiative and ability to attract and hold regular clients also are key factors in determining their earnings. Earnings for entry-level workers are usually low; however, for those who stay in the profession, earnings can be considerably higher.

Although some salons offer paid vacations and medical benefits, many self-employed and part-time workers in this occupation do not enjoy such common benefits.

Related Occupations

Other workers who provide a personal service to clients and usually must be professionally licensed or certified include massage therapists and fitness trainers and aerobics instructors.

Sources of Additional Information

A list of licensed training schools and licensing requirements for cosmetologists can be obtained from:

► National Accrediting Commission of Cosmetology Arts and Sciences, 901 North Stuart St., Suite 900, Arlington, VA 22203-1816. Internet: <http://www.naccas.org>

Information about a career in cosmetology is available from:

► National Cosmetology Association, 401 N. Michigan Ave., 22nd floor, Chicago, IL 60611. Internet: <http://www.salonprofessionals.org>

For details on State licensing requirements and approved barber or cosmetology schools, contact the State boards of barber or cosmetology examiners in your State capital.

Building Cleaning Workers

(O*NET 37-1011.01, 37-1011.02, 37-2011.00, 37-2012.00)

Significant Points

- Limited training requirements, low pay, and numerous part-time and temporary jobs should contribute to the need to replace workers who leave this very large occupation each year.
- Businesses providing janitorial and cleaning services on a contract basis are expected to be one of the fastest growing employers of these workers.

Nature of the Work

Building cleaning workers—which includes janitors, executive housekeepers, and maids and housekeeping cleaners—keep office buildings, hospitals, stores, apartment houses, hotels, and other types of buildings clean and in good condition. Some only do cleaning, while others have a wide range of duties. Janitors and cleaners perform a variety of heavy cleaning duties, such as cleaning floors, shampooing rugs, washing walls and glass, and removing rubbish. They may fix leaky faucets, empty trashcans, do painting and carpentry, replenish bathroom supplies, mow lawns, and see that heating and air-conditioning equipment works properly. On a typical day, janitors may wet- or dry-mop floors, clean bathrooms, vacuum carpets, dust furniture, make minor repairs, and exterminate insects and rodents. They also notify management of the need for repairs and clean snow or debris from sidewalks in front of buildings. Maids and housekeeping cleaners perform any combination of light cleaning duties to maintain private households or commercial establishments, such as hotels, restaurants, and hospitals, in a clean and orderly manner. In hotels, aside from cleaning and maintaining the premises, they may deliver ironing boards, cribs, and rollaway beds to guests' rooms. In hospitals, they also may wash bed frames, brush mattresses, make beds, and disinfect and sterilize equipment and supplies using germicides and sterilizing equipment.

Janitors, maids, and cleaners use various equipment, tools, and cleaning materials. For one job, they may need a mop and bucket; for another, an electric polishing machine and a special cleaning solution. Improved building materials, chemical cleaners, and power equipment have made many tasks easier and less time-consuming, but cleaning workers must learn proper use of equipment and cleaners to avoid harming floors, fixtures, and themselves.

Cleaning supervisors coordinate, schedule, and supervise the activities of janitors and cleaners. They assign tasks and inspect building areas to see that work has been done properly, issue supplies and equipment, inventory stocks to ensure an adequate amount of supplies are present, screen and hire job applicants, and recommend promotions, transfers, or dismissals. They also train new and experienced employees. Supervisors may prepare reports concerning room occupancy, hours worked, and department expenses. Some also perform cleaning duties.



Building cleaning workers perform a variety of heavy cleaning duties, such as cleaning floors, shampooing rugs, washing walls and glass, and removing rubbish.

Cleaners and servants in private households dust and polish furniture; sweep, mop, and wax floors; vacuum; and clean ovens, refrigerators, and bathrooms. They also may wash dishes, polish silver, and change and make beds. Some wash, fold, and iron clothes; a few wash windows. General houseworkers also may take clothes and laundry to the cleaners, buy groceries, and do many other errands.

Working Conditions

Because most office buildings are cleaned while they are empty, many cleaning workers work evening hours. Some, however, such as school and hospital custodians, work in the daytime. When there is a need for 24-hour maintenance, janitors may be assigned to shifts. Most full-time building cleaners work about 40 hours a week. Part-time cleaners usually work in the evenings and on weekends.

Building cleaning workers in large office and residential buildings often work in teams. These teams consist of workers who specialize in vacuuming, trash pickup, and restroom cleaning, among other things. Supervisors conduct inspections to ensure the building is cleaned properly and the team is functioning efficiently.

Building cleaning workers usually work inside heated, well-lighted buildings. However, they sometimes work outdoors sweeping walkways, mowing lawns, or shoveling snow. Working with machines can be noisy, and some tasks, such as cleaning bathrooms and trash rooms, can be dirty and unpleasant. Janitors may

suffer cuts, bruises, and burns from machines, handtools, and chemicals. They spend most of their time on their feet, sometimes lifting or pushing heavy furniture or equipment. Many tasks, such as dusting or sweeping, require constant bending, stooping, and stretching. As a result, janitors also may suffer back injuries and sprains.

Employment

Building cleaning workers held nearly 4.2 million jobs in 2000. Less than 5 percent were self-employed.

Janitors and cleaners work in nearly every type of establishment and held about 2.3 million jobs. They accounted for about 56 percent of all building cleaning workers. About 28 percent worked for firms supplying building maintenance services on a contract basis; 20 percent in educational institutions; and 3 percent in hotels. Other employers included hospitals, restaurants, religious institutions, manufacturing firms, government agencies, and operators of apartment buildings, office buildings, and other types of real estate.

First-line supervisors of housekeeping and janitorial workers held about 219,000 jobs. About 16 percent were employed in hotels; 22 percent in firms supplying building maintenance services on a contract basis; 5 percent in hospitals; and 6 percent in nursing and personal care facilities. Other employers included educational institutions, residential care establishments, and amusement and recreation facilities.

Maids and housekeepers held about 1.6 million jobs. About 25 percent were employed in hotels and other lodging places; 8 percent in hospitals; and 6 percent in nursing and personal care facilities. Other employers included religious organizations and residential care facilities.

Although cleaning jobs can be found in all cities and towns, most are located in highly populated areas where there are many office buildings, schools, apartment houses, and hospitals.

Training, Other Qualifications, and Advancement

No special education is required for most janitorial or cleaning jobs, but beginners should know simple arithmetic and be able to follow instructions. High school shop courses are helpful for jobs involving repair work.

Most building cleaners learn their skills on the job. Usually, beginners work with an experienced cleaner, doing routine cleaning. As they gain more experience, they are assigned more complicated tasks.

In some cities, programs run by unions, government agencies, or employers teach janitorial skills. Students learn how to clean buildings thoroughly and efficiently, how to select and safely use various cleansing agents, and how to operate and maintain machines, such as wet and dry vacuums, buffers, and polishers. Students learn to plan their work, to follow safety and health regulations, to interact positively with people in the buildings they clean, and to work without supervision. Instruction in minor electrical, plumbing, and other repairs also may be given. Those who come in contact with the public should have good communication skills. Employers usually look for dependable, hard-working individuals who are in good health, follow directions well, and get along with other people.

Building cleaners usually find work by answering newspaper advertisements, applying directly to organizations where they would like to work, contacting local labor unions, or contacting State employment service offices.

Advancement opportunities for workers usually are limited in organizations where they are the only maintenance worker. Where there is a large maintenance staff, however, cleaning workers can

be promoted to supervisor and to area supervisor or manager. A high school diploma improves the chances for advancement. Some janitors set up their own maintenance business.

Supervisors usually move up through the ranks. In many establishments, they are required to take some in-service training to improve their housekeeping techniques and procedures, and to enhance their supervisory skills.

A small number of cleaning supervisors and managers are members of the International Executive Housekeepers Association (IEHA). IEHA offers two kinds of certification programs to cleaning supervisors and managers—Certified Executive Housekeeper (CEH) and Registered Executive Housekeeper (REH). The CEH designation is offered to those with a high school education, while the REH designation is offered to those who have a 4-year college degree. Both designations are earned by attending courses and passing exams, and must be renewed every 2 years to ensure that workers keep abreast of new cleaning methods. Those with the REH designation usually oversee the cleaning services of hotels, hospitals, casinos, and other large institutions that rely on well-trained experts for their cleaning needs.

Job Outlook

Overall employment of building cleaning workers is expected to grow about as fast as the average for all occupations through 2010, though job growth will vary depending on where they work. Average growth is expected among both janitors and cleaners and institutional cleaning supervisors, many of whom work in the services to buildings industry. On the other hand, employment of maids and housekeeping cleaners, which includes those in private households, is expected to grow more slowly than the average. In addition to job openings due to growth, numerous openings should result from the need to replace those who leave this very large occupation each year. Limited formal education and training requirements, low pay, and numerous part-time and temporary jobs should contribute to these replacement needs.

To clean the increasing number of office complexes, apartment houses, schools, factories, hospitals, and other buildings, more workers will be assigned to teams with more efficient cleaning equipment and supplies. As many firms reduce costs by hiring independent contractors, businesses providing janitorial and cleaning services on a contract basis are expected to be one of the faster growing employers of these workers.

Earnings

Median annual earnings of janitors and cleaners, except maids and housekeeping cleaners, were \$17,180 in 2000. The middle 50 percent earned between \$14,030 and \$22,340. The lowest 10 percent earned less than \$12,280, and the highest 10 percent earned more than \$29,190. Median annual earnings in the industries employing the largest numbers of janitors and cleaners, except maids and housekeeping cleaners, in 2000 are shown below:

Local government	\$22,900
Real estate operators and lessors	22,110
Elementary and secondary schools	21,100
Colleges and universities	20,320
Services to buildings	15,370

Median annual earnings of maids and housekeepers were \$15,410 in 2000. The middle 50 percent earned between \$13,230 and \$18,030. The lowest 10 percent earned less than \$11,910, and the highest 10 percent earned more than \$22,200. Median annual earnings in the industries employing the largest numbers of maids and housekeepers in 2000 are shown below:

Hospitals	\$16,820
Real estate agents and managers	16,500
Nursing and personal care facilities	15,460
Services to buildings	15,150
Hotels and motels	14,760

Median annual earnings of first-line supervisors/managers of housekeeping and janitorial workers were \$25,760 in 2000. The middle 50 percent earned between \$19,920 and \$33,740. The lowest 10 percent earned less than \$16,220, and the highest 10 percent earned more than \$42,850. Median annual earnings in the industries employing the largest numbers of first-line supervisors/managers of housekeeping and janitorial workers in 2000 are shown below:

Elementary and secondary schools	\$29,540
Hospitals	27,010
Nursing and personal care facilities	25,290
Services to buildings	23,000
Hotels and motels	21,820

Related Occupations

Workers who specialize in one of the many job functions of janitors and cleaners include pest control workers; industrial machinery installation, repair, and maintenance workers; and grounds maintenance workers.

Sources of Additional Information

Information about janitorial jobs may be obtained from State employment service offices.

For information on certification in executive housekeeping, contact:

► International Executive Housekeepers Association, Inc., 1001 Eastwind Dr., Suite 301, Westerville, OH 43081-3361. Internet: <http://www.ieha.org>

Chefs, Cooks, and Food Preparation Workers

(O*NET 35-1011.00, 35-2011.00, 35-2012.00, 35-2013.00, 35-2014.00, 35-2015.00, 35-2021.00)

Significant Points

- Many young people work as chefs, cooks, and food preparation workers—almost 20 percent are between 16 and 19 years old.
- Almost 1 out of 2 food preparation workers are employed part time.
- Job openings are expected to be plentiful through 2010, primarily reflecting substantial turnover in this large occupation.

Nature of the Work

A reputation for serving good food is essential to the success of any restaurant or hotel, whether it offers exotic cuisine or hamburgers. Chefs, cooks, and food preparation workers are largely responsible for establishing and maintaining this reputation. Chefs and cooks do this by preparing meals, while other food preparation workers assist them by cleaning surfaces, peeling vegetables, and performing other duties.

In general, *chefs* and *cooks* measure, mix, and cook ingredients according to recipes. In the course of their work they use a variety of pots, pans, cutlery, and other equipment, including ovens, broilers, grills, slicers, grinders, and blenders. Chefs and head cooks

often are responsible for directing the work of other kitchen workers, estimating food requirements, and ordering food supplies. Some chefs and head cooks also help plan meals and develop menus.

Large eating places tend to have varied menus and kitchen staffs often include several chefs and cooks, sometimes called assistant or apprentice chefs and cooks, along with other less skilled kitchen workers. Each chef or cook usually has a special assignment and often a special job title—*vegetable, fry, or sauce cook*, for example. Executive chefs and head cooks coordinate the work of the kitchen staff and often direct the preparation of certain foods. They decide the size of servings, plan menus, and buy food supplies. Although the terms chef and cook still are used interchangeably, chefs tend to be more highly skilled and better trained than most cooks. Due to their skillful preparation of traditional dishes and refreshing twists in creating new ones, many chefs have earned fame for both themselves and for the establishments where they work.

The specific responsibilities of most cooks are determined by a number of factors, including the type of restaurant in which they work. *Institution and cafeteria cooks*, for example, work in the kitchens of schools, cafeterias, businesses, hospitals, and other institutions. For each meal, they prepare a large quantity of a limited number of entrees, vegetables, and desserts. *Restaurant cooks* usually prepare a wider selection of dishes, cooking most orders individually. *Short-order cooks* prepare foods in restaurants and coffee shops that emphasize fast service. They grill and garnish hamburgers,

prepare sandwiches, fry eggs, and cook french fries, often working on several orders at the same time. *Fast food cooks* prepare a limited selection of menu items in fast-food restaurants. They cook and package batches of food, such as hamburgers and fried chicken, which are prepared to order or kept warm until sold. *Private household cooks* plan and prepare meals, clean the kitchen, order groceries and supplies, and also may serve meals.

Other food preparation workers, under the direction of chefs and cooks, perform tasks requiring less skill. They weigh and measure ingredients, go after pots and pans, and stir and strain soups and sauces. These workers also clean, peel, and slice vegetables and fruits and make salads. They may cut and grind meats, poultry, and seafood in preparation for cooking. Their responsibilities also include cleaning work areas, equipment, utensils, dishes, and silverware.

The number and types of workers employed in kitchens depends on the type of establishment. For example, fast-food establishments offer only a few items, which are prepared by fast-food cooks. Small, full-service restaurants offering casual dining often feature a limited number of easy-to-prepare items supplemented by short-order specialties and ready-made desserts. Typically, one cook prepares all the food with the help of a short-order cook and one or two other kitchen workers.

Working Conditions

Many restaurant and institutional kitchens have modern equipment, convenient work areas, and air conditioning, but many kitchens in older and smaller eating places are not as well equipped. Working conditions depend on the type and quantity of food being prepared and the local laws governing food service operations. Workers usually must withstand the pressure and strain of working in close quarters, standing for hours at a time, lifting heavy pots and kettles, and working near hot ovens and grills. Job hazards include slips and falls, cuts, and burns, but injuries are seldom serious.

Work hours in restaurants may include early mornings, late evenings, holidays, and weekends. Work schedules of chefs, cooks and other kitchen workers in factory and school cafeterias may be more regular. Nearly 3 in 10 cooks and 1 out of 5 other kitchen and food preparation workers have part-time schedules, compared to 1 out of 7 workers throughout the economy.

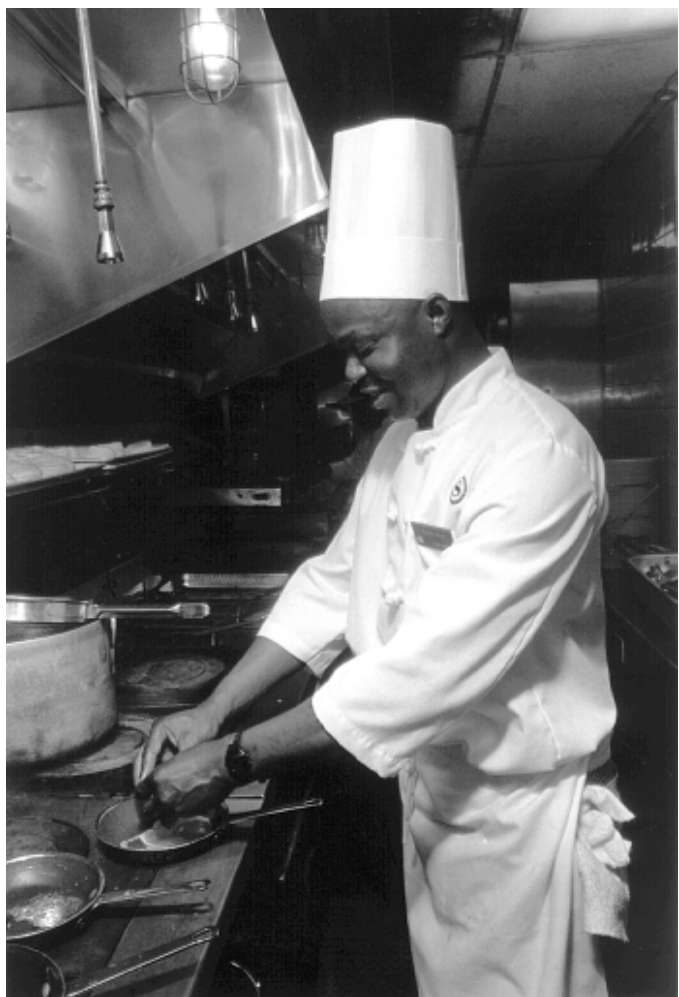
The wide range in dining hours creates work opportunities attractive to homemakers, students, and other individuals seeking supplemental income. For example, about 27 percent of kitchen and food preparation workers are 16-19 years old. Kitchen workers employed by public and private schools may work during the school year only, usually for 9 or 10 months. Similarly, establishments at vacation resorts usually only offer seasonal employment.

Employment

Chefs, cooks and food preparation workers held more than 2.8 million jobs in 2000. The distribution of jobs among the various types of chefs, cooks, and food preparation workers was as follows:

Food preparation workers	844,000
Cooks, restaurant	668,000
Cooks, fast food	522,000
Cooks, institution and cafeteria	465,000
Cooks, short order	205,000
Chefs and head cooks	139,000
Cooks, private household	5,200

Almost 60 percent of all chefs, cooks, and food preparation workers were employed in restaurants and other retail eating and drinking places. About 20 percent worked in institutions such as schools, universities, hospitals, and nursing homes. Grocery stores, hotels, and other organizations employed the remainder.



Chefs, cooks, and food preparation workers are essential to the success of any restaurant or full-service hotel.

Training, Other Qualifications, and Advancement

Most chefs, cooks, and food preparation workers start as fast-food or short-order cooks, or in other lower skilled kitchen positions. These positions require little education or training, and most skills are learned on the job. After acquiring some basic food handling, preparation, and cooking skills, these workers may be able to advance to an assistant cook position.

Although a high school diploma is not required for beginning jobs, it is recommended for those planning a career as a cook or chef. High school or vocational school courses in business arithmetic and business administration are particularly helpful. Many school districts, in cooperation with State departments of education, provide on-the-job training and summer workshops for cafeteria kitchen workers with aspirations of becoming cooks. Large corporations in the food service and hotel industries also offer paid internships and summer jobs, which can provide valuable experience.

To achieve the level of skill required of an executive chef or cook in a fine restaurant, many years of training and experience are necessary. An increasing number of chefs and cooks obtain their training through high school, post-high school vocational programs, or 2- or 4-year colleges. Chefs and cooks also may be trained in apprenticeship programs offered by professional culinary institutes, industry associations, and trade unions. An example is the 3-year apprenticeship program administered by local chapters of the American Culinary Federation in cooperation with local employers and junior colleges or vocational education institutions. In addition, some large hotels and restaurants operate their own training programs for cooks and chefs.

People who have had courses in commercial food preparation may be able to start in a cook or chef job without having to spend time in a lower skilled kitchen job. Their education may give them an advantage when looking for jobs in better restaurants and hotels, where hiring standards often are high. Although some vocational programs in high schools offer training, employers usually prefer training given by trade schools, vocational centers, colleges, professional associations, or trade unions. Postsecondary courses range from a few months to 2 years or more and are open, in some cases, only to high school graduates. About 8 to 15 years as a cook is required to become a fully qualified chef. Those who gain experience, including in a supervisory capacity, may become executive chefs with responsibility for more than one kitchen. The U.S. Armed Forces also are a good source of training and experience.

Although curricula may vary, students in these programs usually spend most of their time learning to prepare food through actual practice. They learn to bake, broil, and otherwise prepare food, and to use and care for kitchen equipment. Training programs often include courses in menu planning, determination of portion size, food cost control, purchasing food supplies in quantity, selection and storage of food, and use of leftover food to minimize waste. Students also learn hotel and restaurant sanitation and public health rules for handling food. Training in supervisory and management skills sometimes is emphasized in courses offered by private vocational schools, professional associations, and university programs.

Across the Nation, a number of schools offer culinary courses. The American Culinary Federation has accredited over 100 training programs and offers a number of apprenticeship programs around the country. Typical apprenticeships last three years and combine classroom and work experience. Accreditation is an indication that a culinary program meets recognized standards regarding course content, facilities, and quality of instruction. The American Culinary Federation also certifies pastry professionals, culinary educators, and chefs and cooks at the levels of cook, working chef, executive chef, and master chef. Certification standards are based primarily on experience and formal training.

Important characteristics for chefs, cooks, and food preparation workers include the ability to work as part of a team, a keen sense of taste and smell, and personal cleanliness. Most States require health certificates indicating that workers are free from communicable diseases.

Advancement opportunities for chefs and cooks are better than for most other food and beverage preparation and service occupations. Many chefs and cooks acquire high-paying positions and new cooking skills by moving from one job to another. Besides culinary skills, advancement also depends on ability to supervise less skilled workers and limit food costs by minimizing waste and accurately anticipating the amount of perishable supplies needed. Some chefs and cooks go into business as caterers or restaurant owners, while others become instructors in vocational programs in high schools, community colleges, or other academic institutions. A number of cooks and chefs advance to executive chef positions or supervisory or management positions, particularly in hotels, clubs, and larger, more elegant restaurants. (See the separate *Handbook* statement on food service managers.)

Job Outlook

Job openings for chefs, cooks, and food preparation workers are expected to be plentiful through 2010. While job growth will create new positions, the overwhelming majority of job openings will stem from the need to replace workers who leave this large occupational group. Minimal educational and training requirements, combined with a large number of part-time positions, make employment as chefs, cooks, and food preparation workers attractive to people seeking a short-term source of income and a flexible schedule. In coming years, these workers will continue to transfer to other occupations or stop working to assume household responsibilities or to attend school full time, creating numerous openings for those entering the field.

Job openings stemming from replacement needs will be supplemented by new openings resulting from employment growth, as overall employment of chefs, cooks, and food preparation workers is expected to increase about as fast as the average for all occupations over the 2000-10 period. Employment growth will be spurred by increases in population, household income, and leisure time that will allow people to dine out and take vacations more often. In addition, growth in the number of two-income households will lead more families to opt for the convenience of dining out.

Projected employment growth, however, varies by specialty. Increases in the number of families and the more affluent, 55-and-older population will lead to more restaurants that offer table service and more varied menus—resulting in faster-than-average growth among higher-skilled restaurant cooks. As more Americans choose more full-service restaurants, employment of fast-food cooks is expected to decline and employment of short-order cooks, most of whom work in fast-food restaurants, is expected to grow more slowly than average. Duties of cooks in fast-food restaurants are limited; most workers are likely to be combined food preparation and serving workers, rather than fast-food cooks. In addition, fast-food restaurants increasingly offer healthier prepared foods, further reducing the need for cooks.

Employment of institution and cafeteria chefs and cooks also will grow more slowly than the average for all occupations. Their employment will not keep pace with the rapid growth in the educational and health services industries—where their employment is concentrated. In an effort to make “institutional food” more attractive to students, staff, visitors, and patients, high schools and hospitals increasingly contract out their food services. Many of the contracted food service companies emphasize simple menu items and employ short-order cooks, instead of institution and cafeteria cooks, reducing the demand for these workers.

Earnings

Wages of chefs, cooks, and food preparation workers depend greatly on the part of the country and the type of establishment in which they are employed. Wages usually are highest in elegant restaurants and hotels, where many executive chefs are employed.

Median hourly earnings of head cooks and chefs were \$12.07 in 2000. The middle 50 percent earned between \$8.98 and \$16.75. The lowest 10 percent earned less than \$7.39, and the highest 10 percent earned more than \$22.77 per hour. Median hourly earnings in the industries employing the largest number of head cooks and chefs in 2000 were:

Miscellaneous amusement and recreation services	\$16.50
Hotels and motels	15.78
Eating and drinking places	11.03

Median hourly earnings of restaurant cooks were \$8.72 in 2000. The middle 50 percent earned between \$7.35 and \$10.33. The lowest 10 percent earned less than \$6.30, and the highest 10 percent earned more than \$12.43 per hour. Median hourly earnings in the industries employing the largest number of restaurant cooks in 2000 were:

Hotels and motels	\$9.97
Miscellaneous amusement and recreation services	9.68
Eating and drinking places	8.57

Median hourly earnings of cooks in fast-food restaurants were \$6.53 in 2000. The middle 50 percent earned between \$5.90 and \$7.53. The lowest 10 percent earned less than \$5.49, and the highest 10 percent earned more than \$8.43 per hour. Median hourly earnings in eating and drinking places, the industry employing the largest number of fast-food cooks, were \$6.52 in 2000.

Median hourly earnings of short-order cooks were \$7.55 in 2000. The middle 50 percent earned between \$6.32 and \$9.20. The lowest 10 percent earned less than \$5.67, and the highest 10 percent earned more than \$10.83 per hour. Median hourly earnings in the industries employing the largest number of short-order cooks in 2000 were:

Hotels and motels	\$8.66
Miscellaneous amusement and recreation services	7.94
Eating and drinking places	7.57
Gasoline service stations	6.87
Grocery stores	6.60

Median hourly earnings of institution and cafeteria cooks were \$8.22 in 2000. The middle 50 percent earned between \$6.70 and \$10.24. The lowest 10 percent earned less than \$5.84, and the highest 10 percent earned more than \$12.53 per hour. Median hourly earnings in the industries employing the largest number of institution and cafeteria cooks in 2000 were:

Hospitals	\$9.37
Nursing and personal care facilities	8.50
Eating and drinking places	8.29
Elementary and secondary schools	7.65
Child day care services	7.52

Median hourly earnings of food preparation workers were \$7.38 in 2000. The middle 50 percent earned between \$6.28 and \$8.81. The lowest 10 percent earned less than \$5.67, and the highest 10 percent earned more than \$10.65 per hour. Median hourly earnings in the industries employing the largest number of food preparation workers in 2000 were:

Elementary and secondary schools	\$8.14
Hospitals	8.12
Grocery stores	7.90
Nursing and personal care facilities	7.56
Eating and drinking places	6.88

Some employers provide employees with uniforms and free meals, but Federal law permits employers to deduct from their employees' wages the cost or fair value of any meals or lodging provided, and some employers do so. Chefs, cooks, and food preparation workers who work full time often receive typical benefits, but part-time workers usually do not.

In some large hotels and restaurants, kitchen workers belong to unions. The principal unions are the Hotel Employees and Restaurant Employees International Union and the Service Employees International Union.

Related Occupations

Workers who perform tasks similar to those of chefs, cooks, and food preparation workers include food processing occupations such as butchers and meat cutters, and bakers.

Sources of Additional Information

Information about job opportunities may be obtained from local employers and local offices of the State employment service.

Career information about chefs, cooks, and other kitchen workers, as well as a directory of 2- and 4-year colleges that offer courses or programs that prepare persons for food service careers, is available from:

► National Restaurant Association, 1200 17th St. NW., Washington, DC 20036-3097. Internet: <http://www.restaurant.org>

For information on the American Culinary Federation's apprenticeship and certification programs for cooks, as well as a list of accredited culinary programs, send a self-addressed, stamped envelope to:

► American Culinary Federation, 10 San Bartola Dr., St. Augustine, FL 32085. Internet: <http://www.acfchefs.org>

For general information on hospitality careers, contact:

► International Council on Hotel, Restaurant, and Institutional Education, 3205 Skipwith Rd., Richmond, VA 23294-4442. Internet: <http://www.chrie.org>

Childcare Workers

(O*NET 39-9011.00)

Significant Points

- About 2 out of 5 childcare workers are self-employed; most of these are family childcare providers.
- A high school diploma and little or no experience are adequate for many jobs, but training requirements vary from a high school diploma to a college degree.
- High turnover should create good job opportunities.

Nature of the Work

Childcare workers nurture and teach children of all ages in childcare centers, nursery schools, preschools, public schools, private households, family childcare homes, and before- and after-school programs. These workers play an important role in a child's development by caring for the child when parents are at work or away for other reasons. Some parents enroll their children in nursery schools or childcare centers primarily to provide them with the opportunity to interact with other children. In addition to attending to children's basic needs, these workers organize activities that stimulate the children's physical, emotional, intellectual, and social growth. They help children explore their interests, develop their talents and independence, build self-esteem, and learn how to behave with others.

Private household workers who are employed on an hourly basis usually are called baby-sitters. These childcare workers bathe, dress, and feed children; supervise their play; wash their clothes; and clean their rooms. They also may put them to sleep and waken them, read to them, involve them in educational games, take them for doctors' visits, and discipline them. Those who are in charge of infants, sometimes called infant nurses, also prepare bottles and change diapers.

Nannies generally take care of children from birth to age 10 or 12, tending to the child's early education, nutrition, health, and other needs. They also may perform the duties of a general housekeeper, including general cleaning and laundry duties.

Childcare workers spend most of their day working with children. However, they do maintain contact with parents or guardians through informal meetings or scheduled conferences to discuss each child's progress and needs. Many childcare workers keep records of each child's progress and suggest ways that parents can increase their child's learning and development at home. Some preschools, childcare centers, and before- and after-school programs actively recruit parent volunteers to work with the children and participate in administrative decisions and program planning.

Most childcare workers perform a combination of basic care and teaching duties. Through many basic care activities, childcare workers provide opportunities for children to learn. For example, a worker who shows a child how to tie a shoelace teaches the child while also providing for that child's basic care needs. Childcare programs help children learn about trust and gain a sense of security.

Young children learn mainly through play. Recognizing the importance of play, childcare workers build their program around it. They capitalize on children's play to further language development (storytelling and acting games), improve social skills (working together to build a neighborhood in a sandbox), and introduce scientific and mathematical concepts (balancing and counting blocks when building a bridge or mixing colors when painting). Thus, a less structured approach is used to teach preschool children, including small group lessons, one-on-one instruction, and learning through creative activities, such as art, dance, and music.

Interaction with peers is an important part of a child's early development. Preschool children are given an opportunity to engage in conversation and discussions, and learn to play and work cooperatively with their classmates. Childcare workers play a vital role in preparing children to build the skills they will need in school. (Statements on teacher assistants as well as teachers—preschool, kindergarten, elementary, middle, and secondary school appear elsewhere in the *Handbook*.)

Childcare workers in preschools greet young children as they arrive, help them remove outer garments, and select an activity of interest. When caring for infants, they feed and change them. To ensure a well-balanced program, childcare workers prepare daily and long-term schedules of activities. Each day's activities balance individual and group play and quiet and active time. Children are given some freedom to participate in activities in which they are interested.

Workers in before- and after-school programs may help students with their homework or engage them in other extracurricular activities. These activities may include field trips, learning about computers, painting, photography, and participating in sports. Some childcare workers may be responsible for taking children to school in the morning and picking them up from school in the afternoon. Concern over school-age children being home alone before and after school has spurred many parents to seek alternative ways for their children to constructively spend their time. The purpose of before- and after-school programs is to watch over school-age children during the gap between school hours and their parents' work



Most childcare workers perform a variety of basic care and teaching duties.

hours. These programs also may operate during the summer and on weekends. Before- and after-school programs may be operated by public school systems, local community centers, or other private organizations.

Helping to keep young children healthy is an important part of the job. Childcare workers serve nutritious meals and snacks and teach good eating habits and personal hygiene. They ensure that children have proper rest periods. They identify children who may not feel well or who show signs of emotional or developmental problems and discuss these matters with their supervisor and the child's parents. In some cases, childcare workers help parents identify programs that will provide basic health services.

Early identification of children with special needs, such as those with behavioral, emotional, physical, or learning disabilities, is important to improve their future learning ability. Special education teachers often work with these preschool children to provide the individual attention they need. (Special education teachers are discussed elsewhere in the *Handbook*.)

Working Conditions

Preschool or childcare facilities include private homes, schools, religious institutions, workplaces in which employers provide care for employees' children, and private buildings. Individuals who provide care in their own homes generally are called family childcare providers.

Nannies and babysitters usually work in the pleasant and comfortable homes or apartments of their employers. Most are day workers who live in their own homes and travel to work. Some live in the home of their employer, generally with their own room and bath. They often become part of their employer's family, and may derive satisfaction from caring for them.

Watching children grow, learn, and gain new skills can be very rewarding. While working with children, childcare workers often improve the child's communication, learning, and other personal skills. The work is never routine; new activities and challenges mark each day. However, childcare can be physically and emotionally taxing, as workers constantly stand, walk, bend, stoop, and lift to attend to each child's interests and problems.

To ensure that children receive proper supervision, State or local regulations may require certain ratios of workers to children. The ratio varies with the age of the children. Child development experts generally recommend that a single caregiver be responsible for no more than 3 or 4 infants (less than 1 year old), 5 or 6 toddlers

(1 to 2 years old), or 10 preschool-age children (between 2 and 5 years old). In before- and after-school programs, workers may be responsible for many school-age children at one time.

The working hours of childcare workers vary widely. Childcare centers usually are open year round, with long hours so that parents can drop off and pick up their children before and after work. Some centers employ full-time and part-time staff with staggered shifts to cover the entire day. Some workers are unable to take regular breaks during the day due to limited staffing. Public and many private preschool programs operate during the typical 9- or 10-month school year, employing both full-time and part-time workers. Family childcare providers have flexible hours and daily routines, but may work long or unusual hours to fit parents' work schedules. Live-in nannies usually work longer hours than those who have their own homes. However, if they work evenings or weekends, they may get other time off.

Turnover in this occupation is high. Many childcare workers leave the occupation temporarily to fulfill family responsibilities or to study, or for other reasons. Some workers leave permanently because they are interested in pursuing another occupation or because of dissatisfaction with long hours, low pay and benefits, and stressful conditions.

Employment

Childcare workers held about 1.2 million jobs in 2000. Many worked part time. About 2 out of 5 childcare workers are self-employed; most of these are family childcare providers.

Twelve percent of all childcare workers are found in childcare centers and preschools, and about 3 percent work for religious institutions. The remainder work in other community organizations, State and local government, and private households. Some childcare programs are for-profit centers; some of these are affiliated with a local or national chain. Religious institutions, community agencies, school systems, and State and local governments operate non-profit programs. Only a very small percentage of private industry establishments operate onsite childcare centers for the children of their employees.

Training, Other Qualifications, and Advancement

The training and qualifications required of childcare workers vary widely. Each State has its own licensing requirements that regulate caregiver training, ranging from a high school diploma, to community college courses, to a college degree in child development or early-childhood education. Many States require continuing education for workers in this field. However, State requirements often are minimal. Childcare workers generally can obtain employment with a high school diploma and little or no experience. Local governments, private firms, and publicly funded programs may have more demanding training and education requirements.

Some employers prefer to hire childcare workers with a nationally recognized childcare development credential, secondary or postsecondary courses in child development and early childhood education, or work experience in a childcare setting. Other employers require their own specialized training. An increasing number of employers require an associate degree in early childhood education. Schools for nannies teach early childhood education, nutrition, and childcare.

Childcare workers must be enthusiastic and constantly alert, anticipate and prevent problems, deal with disruptive children, and provide fair but firm discipline. They must communicate effectively with the children and their parents, as well as other teachers and childcare workers. Workers should be mature, patient, understanding, and articulate, and have energy and physical stamina. Skills in music, art, drama, and storytelling also are important. Those

who work for themselves must have business sense and management abilities.

Opportunities for advancement are limited. However, as childcare workers gain experience, some may advance to supervisory or administrative positions in large childcare centers or preschools. Often, these positions require additional training, such as a bachelor's or master's degree. Other workers move on to work in resource and referral agencies, consulting with parents on available child services. A few workers become involved in policy or advocacy work related to childcare and early childhood education. With a bachelor's degree, workers may become preschool teachers or become certified to teach in public or private schools at the kindergarten, elementary, and secondary school levels. Some workers set up their own childcare businesses.

Job Outlook

High turnover should create good job opportunities for childcare workers. Many childcare workers leave the occupation each year to take other jobs, to meet family responsibilities, or for other reasons. Qualified persons who are interested in this work should have little trouble finding and keeping a job. Opportunities for nannies should be especially good, as many workers prefer not to work in other people's homes.

Employment of childcare workers is projected to increase about as fast as the average for all occupations through the year 2010. Employment growth of childcare workers should be considerably slower than in the last two decades because demographic changes that fueled much of the past enrollment growth are projected to slow. Labor force participation of women of childbearing age will increase very little, and this group of women will decline as a percentage of the total labor force. However, the number of children under 5 years of age is expected to rise gradually over the projected 2000-10 period. The proportion of youngsters enrolled full- or part-time in childcare and preschool programs is likely to continue to increase, spurring demand for additional childcare workers.

Changes in perceptions of preprimary education may lead to increased public and private spending on childcare. If more parents believe that some experience in center-based care and preschool is beneficial to children, enrollment will increase. Concern about the behavior of school-age children during nonschool hours should increase demand for before- and after-school programs. The difficulty of finding suitable nannies or private household workers also may force many families to seek out alternative childcare arrangements in centers and family childcare programs. Government policy often favors increased funding of early childhood education programs, and that trend should continue. Government funding for before- and after-school programs also is expected to increase over the projection period. The growing availability of government-funded programs may induce some parents who otherwise would not enroll their children in center-based care and preschool to do so. Some States also are increasing subsidization of the childcare services industry in response to welfare reform legislation. This reform may cause some mothers to enter the workforce during the projection period as their welfare benefits are reduced or eliminated.

Earnings

Pay depends on the educational attainment of the worker and the type of establishment. Although the pay generally is very low, more education usually means higher earnings. Median hourly earnings of wage and salary childcare workers were \$7.43 in 2000. The middle 50 percent earned between \$6.30 and \$9.09. The lowest 10 percent earned less than \$5.68, and the highest 10 percent earned more than \$10.71. Median hourly earnings in the industries employing the largest numbers of childcare workers in 2000 were as follows:

Residential care	\$8.71
Elementary and secondary schools	8.52
Civic and social associations	6.98
Child daycare services	6.74
Miscellaneous amusement and recreation services	6.65

Earnings of self-employed childcare workers vary depending on the hours worked, the number and ages of the children, and the location.

Benefits vary, but are minimal for most childcare workers. Many employers offer free or discounted childcare to employees. Some offer a full benefits package, including health insurance and paid vacations, but others offer no benefits at all. Some employers offer seminars and workshops to help workers learn new skills. A few are willing to cover the cost of courses taken at community colleges or technical schools. Live-in nannies get free room and board.

Related Occupations

Childcare work requires patience; creativity; an ability to nurture, motivate, teach, and influence children; and leadership, organizational, and administrative skills. Others who work with children and need these qualities and skills include teacher assistants; teachers—preschool, kindergarten, elementary, middle, and secondary; and special education teachers.

Sources of Additional Information

For eligibility requirements and a description of the Child Development Associate credential, contact:

➤ Council for Professional Recognition, 2460 16th St. NW., Washington, DC 20009-3575. Internet: <http://www.cdacouncil.org>

For eligibility requirements and a description of the Certified Childcare Professional designation, contact:

➤ National Childcare Association, 1016 Rosser St., Conyers, GA 30012. Internet: <http://www.nccanet.org>

For information about a career as a nanny, contact:

➤ International Nanny Association, 900 Haddon Ave., Suite 438, Collingswood, NJ 08108. Internet: <http://www.nanny.org>

State Departments of Human Services or Social Services can supply State regulations and training requirements for childcare workers.



Although the primary job of flight attendants is to ensure that safety regulations are followed, they also try to make flights comfortable and enjoyable for passengers.

with adequate supplies of food, beverages, and blankets. As passengers board the plane, flight attendants greet them, check their tickets, and tell them where to store coats and carry-on items.

Before the plane takes off, flight attendants instruct all passengers in the use of emergency equipment and check to see that seat belts are fastened, seat backs are in upright positions, and all carry-on items are properly stowed. In the air, helping passengers in the event of an emergency is the most important responsibility of a flight attendant. Safety-related actions may range from reassuring passengers during occasional encounters with strong turbulence to directing passengers who must evacuate a plane following an emergency landing. Flight attendants also answer questions about the flight; distribute reading material, pillows, and blankets; and help small children, elderly or disabled persons, and any others needing assistance. They may administer first aid to passengers who become ill. Flight attendants generally serve beverages and other refreshments and, on many flights, heat and distribute precooked meals or snacks. Prior to landing, flight attendants take inventory of headsets, alcoholic beverages, and moneys collected. They also report any medical problems passengers may have had, and the condition of cabin equipment. In addition to performing flight duties, flight attendants sometimes make public relations appearances for the airlines during “career days” at high schools and at fundraising campaigns, sales meetings, conventions, and other goodwill occasions.

Lead, or first, flight attendants, sometimes known as pursers, oversee the work of the other attendants aboard the aircraft, while performing most of the same duties.

Working Conditions

Because airlines operate around-the-clock year-round, flight attendants may work nights, holidays, and weekends. In most cases, agreements between the airline and the employees’ union determine the total monthly working time. Attendants usually fly 75 to 85 hours a month and, in addition, generally spend about 75 to 85 hours a month on the ground preparing planes for flights, writing reports following completed flights, and waiting for planes to arrive. Because of variations in scheduling and limitations on flying time, many flight attendants have 11 or more days off each month. They may be away from their home base at least one-third of the time. During this period, the airlines provide hotel accommodations and an allowance for meal expenses.

Flight Attendants

(O*NET 39-6031.00)

Significant Points

- Job duties are learned through intensive formal training after workers are hired.
- The opportunity for travel attracts many to this career, but the job requires working nights, weekends, and holidays and frequently being away from home.

Nature of the Work

Major airlines are required by law to provide flight attendants for the safety of the traveling public. Although the primary job of the flight attendants is to ensure that safety regulations are followed, they also try to make flights comfortable and enjoyable for passengers.

At least 1 hour before each flight, flight attendants are briefed by the captain, the pilot in command, on such things as emergency evacuation procedures, crew coordination, length of flight, expected weather conditions, and special passenger issues. Flight attendants make sure that first aid kits and other emergency equipment are aboard and in working order and that the passenger cabin is in order,

The combination of free time and discount air fares provides flight attendants the opportunity to travel and see new places. However, the work can be strenuous and trying. Short flights require speedy service if meals are served, and turbulent flights can make serving drinks and meals difficult. Flight attendants stand during much of the flight and must remain pleasant and efficient, regardless of how tired they are or how demanding passengers may be. Occasionally, flight attendants must deal with disruptive passengers.

Flight attendants are susceptible to injuries because of the job demands in a moving aircraft. Back injuries and mishaps opening overhead compartments are common. In addition, medical problems can occur from irregular sleeping and eating patterns, dealing with stressful passengers, working in a pressurized environment, and breathing recycled air.

Employment

Flight attendants held about 124,000 jobs in 2000. Commercial airlines employed the vast majority of all flight attendants, most of whom live in their employer's home base city. A small number of flight attendants worked for large companies that operated company aircraft for business purposes.

Training, Other Qualifications, and Advancement

Airlines prefer to hire poised, tactful, and resourceful people who can interact comfortably with strangers and remain calm under duress. Applicants usually must be at least 18 to 21 years old. Flight attendants must have excellent health and the ability to speak clearly. In addition, there generally are height requirements, and most airlines want candidates with weight proportionate to height.

Prospective flight attendants usually must be willing to relocate, although many flight attendants are able to commute to and from their home base. Applicants must be high school graduates. Those having several years of college or experience in dealing with the public are preferred. More and more flight attendants being hired are college graduates. Highly desirable areas of concentration include such people-oriented disciplines as psychology and education. Flight attendants for international airlines generally must speak a foreign language fluently. Some of the major airlines prefer candidates who can speak two major foreign languages for their international flights.

Once hired, candidates must undergo a period of formal training. The length of training, ranging from 4 to 7 weeks, depends on the size and type of carrier and takes place in the airline's flight training center. Airlines that do not operate training centers generally send new employees to the center of another airline. Airlines may provide transportation to the training centers and an allowance for board, room, and school supplies. However, new trainees are not considered employees of the airline until they successfully complete the training program. Some airlines may actually charge individuals for training. Trainees learn emergency procedures such as evacuating an airplane, operating emergency systems and equipment, administering first aid, and water survival tactics. In addition, trainees are taught how to deal with disruptive passengers and hijacking and terrorist situations. New hires learn flight regulations and duties, company operations and policies, and receive instruction on personal grooming and weight control. Trainees for the international routes get additional instruction in passport and customs regulations. Towards the end of their training, students go on practice flights. Additionally, flight attendants must receive 12 to 14 hours of annual training in emergency procedures and passenger relations.

After completing initial training, flight attendants are assigned to one of their airline's bases. New flight attendants are placed on "reserve status" and are called on either to staff extra flights or to

fill in for crewmembers who are sick or on vacation or rerouted. When not on duty, reserve flight attendants must be available to report for flights on short notice. They usually remain on reserve for at least 1 year but, in some cities, it may take 5 to 10 years or longer to advance from reserve status. Flight attendants who no longer are on reserve bid monthly for regular assignments. Because assignments are based on seniority, usually only the most experienced attendants get their choice of assignments. Advancement takes longer today than in the past because experienced flight attendants are remaining in this career longer than they used to.

Some flight attendants become supervisors, or take on additional duties such as recruiting and instructing. Their experience also may qualify them for numerous airline-related jobs involving contact with the public, such as reservation ticket agents or public relations specialists.

Job Outlook

Opportunities should be favorable for persons seeking flight attendant jobs because the number of applicants is expected to be roughly the same as the number of job openings. Those with at least 2 years of college and experience in dealing with the public should have the best chance of being hired. The majority of job openings through the year 2010 should be due to the need to replace flight attendants who transfer to other occupations or who leave the labor force. Many flight attendants are attracted to the occupation by the glamour of the airline industry and the opportunity to travel, but some eventually leave in search of jobs that offer higher earnings and require fewer nights away from their families.

Employment of flight attendants is expected to grow about as fast as the average for all occupations through the year 2010. Growth in population and income is expected to boost the number of airline passengers. Airlines enlarge their capacity by increasing the number and size of planes in operation. Because FAA safety rules require one attendant for every 50 seats, more flight attendants will be needed.

Employment of flight attendants is sensitive to cyclical swings in the economy. During recessions, when the demand for air travel declines, many flight attendants are put on part-time status or laid off. Until demand increases, few new flight attendants are hired.

Earnings

Median annual earnings of flight attendants were \$38,820 in 2000. The middle 50 percent earned between \$28,200 and \$56,610. The lowest 10 percent earned less than \$18,090, and the highest 10 percent earned more than \$83,630.

According to data from the Association of Flight Attendants, beginning flight attendants had median earnings of about \$14,847 a year in 2000. However, beginning pay scales for flight attendants vary by carrier. New hires usually begin at the same pay scale regardless of experience, and all flight attendants receive the same future pay increases. Flight attendants receive extra compensation for night and international flights and for increased hours. In addition, some airlines offer incentive pay for working holidays or taking positions that require additional responsibility or paperwork. Most airlines guarantee a minimum of 65 to 75 flight hours per month, with the option to work additional hours. Flight attendants also receive a "per diem" allowance for meal expenses while on duty away from home. In addition, flight attendants and their immediate families are entitled to free fares on their own airline and reduced fares on most other airlines.

Flight attendants are required to purchase uniforms and wear them while on duty. The airlines usually pay for uniform replacement items, and may provide a small allowance to cover cleaning and upkeep of the uniforms.

The majority of flight attendants hold union membership, primarily with the Association of Flight Attendants. Others may be members of the Transport Workers Union of America, the International Brotherhood of Teamsters, or other unions.

Related Occupations

Other jobs that involve helping people as a safety professional, while requiring the ability to be calm even under trying circumstances, include emergency medical technicians and paramedics and firefighting occupations.

Sources of Additional Information

Information about job opportunities and qualifications required for work at a particular airline may be obtained by writing to the airline's personnel office.

Food and Beverage Serving and Related Workers

(O*NET 35-3011.00, 35-3021.00, 35-3022.00, 35-3031.00, 35-3041.00, 35-9011.00, 35-9021.00, 35-9031.00)

Significant Points

- Most jobs are part time and many opportunities exist for young people—nearly 2 out of 3 food counter and fountain workers are 16 to 19 years old.
- Job openings are expected to be abundant through 2010, reflecting substantial turnover.
- Tips comprise a major portion of earnings; consequently, keen competition is expected for bartender, waiter and waitress, and other jobs in popular restaurants and fine dining establishments where potential earnings from tips are greatest.

Nature of the Work

Whether they work in small, informal diners or large, elegant restaurants, all food and beverage serving and related workers aim to help customers have a positive dining experience in their establishments. These workers greet customers, take food and drink orders, serve food, clean up after patrons, and prepare tables and dining areas.

The largest group of these workers, *waiters and waitresses*, take customers' orders, serve food and beverages, prepare itemized checks, and sometimes accept payments. Their specific duties vary considerably, depending on the establishment where they work. In coffee shops, they are expected to provide fast and efficient, yet courteous service. In fine restaurants, where gourmet meals are accompanied by attentive formal service, waiters and waitresses serve meals at a more leisurely pace and offer more personal service to patrons. For example, servers may recommend a certain wine as a complement to a particular entree, explain how various items on the menu are prepared, or complete preparations on a salad or other special dishes at tableside. Additionally, waiters and waitresses may check the identification of patrons to ensure they meet the minimum age requirement for the purchase of alcohol and tobacco products.

Depending on the type of restaurant, waiters and waitresses may perform additional duties usually associated with other food and beverage service occupations. These tasks may include escorting guests to tables, serving customers seated at counters, setting up and

clearing tables, or operating a cash register. However, formal restaurants frequently hire other staff to perform these duties, allowing their waiters and waitresses to concentrate on customer service.

Bartenders fill drink orders that waiters and waitresses take from customers. They prepare standard mixed drinks and, occasionally, are asked to mix drinks to suit a customer's taste. Most bartenders know dozens of drink recipes and are able to mix drinks accurately, quickly, and without waste, even during the busiest periods. Besides mixing and serving drinks, bartenders collect payment, operate the cash register, clean up after customers leave, and often serve food to customers seated at the bar. Bartenders also check identification of customers seated at the bar, to ensure they meet the minimum age requirement for the purchase of alcohol and tobacco products. Bartenders usually are responsible for ordering and maintaining an inventory of liquor, mixes, and other bar supplies. They often form attractive displays out of bottles and glassware and wash the glassware and utensils after each use.

The majority of bartenders who work in eating and drinking establishments directly serve and interact with patrons. Because customers typically frequent drinking establishments for the friendly atmosphere, most bartenders must be friendly and helpful with customers. Bartenders at service bars, on the other hand, have little contact with customers because they work in small bars in restaurants, hotels, and clubs where only waiters and waitresses serve drinks. Some establishments, especially larger ones, use automatic equipment to mix drinks of varying complexity at the push of a button. Even in these establishments, however, bartenders still must be efficient and knowledgeable in case the device malfunctions or a customer requests a drink not handled by the equipment.

Hosts and hostesses try to create a good impression of a restaurant by warmly welcoming guests. Because hosts and hostesses are restaurants' personal representatives, they try to insure that service is prompt and courteous and that the meal meets expectations. They may courteously direct patrons to where coats and other personal items may be left and indicate where patrons can wait until their table is ready. Hosts and hostesses assign guests to tables suitable for the size of their group, escort patrons to their seats, and provide menus. They also schedule dining reservations, arrange parties, and organize any special services that are required. In some restaurants, they also act as cashiers.

Dining room and cafeteria attendants and bartender helpers assist waiters, waitresses, and bartenders by cleaning tables, removing dirty dishes, and keeping serving areas stocked with supplies. They replenish the supply of clean linens, dishes, silverware, and glasses in the dining room and keep the bar stocked with glasses, liquor, ice, and drink garnishes. Bartender helpers also keep bar equipment clean and wash glasses. Dining room attendants set tables with clean tablecloths, napkins, silverware, glasses, and dishes and serve ice water, rolls, and butter. At the conclusion of meals, they remove dirty dishes and soiled linens from tables. Cafeteria attendants stock serving tables with food, trays, dishes, and silverware and may carry trays to dining tables for patrons. *Dishwashers* clean dishes, kitchen and food preparation equipment, and utensils.

Counter attendants take orders and serve food at counters. In cafeterias, they serve food displayed on counters and steam tables, carve meat, dish out vegetables, ladle sauces and soups, and fill beverage glasses. In lunchrooms and coffee shops, counter attendants take orders from customers seated at the counter, transmit orders to the kitchen, and pick up and serve food. They also fill cups with coffee, soda, and other beverages and prepare fountain specialties, such as milkshakes and ice cream sundaes. Counter attendants prepare some short-order items, such as sandwiches and salads, and wrap or place orders in containers for carry out. They also clean counters, write itemized checks, and sometimes accept payment.



Among their many duties, food and beverage servers are responsible for preparing dining areas and setting tables.

Some food and beverage serving workers take orders from customers at counters or drive-through windows at fast-food restaurants. They pick up the ordered beverage and food items, serve them to a customer, and accept payment. Many of these are *combined food preparation and serving workers* who also cook and package food, make coffee, and fill beverage cups using drink-dispensing machines.

Other workers serve food to patrons outside of a restaurant environment, such as in hotels, hospital rooms, or cars.

Working Conditions

Food and beverage service workers are on their feet most of the time and often carry heavy trays of food, dishes, and glassware. During busy dining periods, they are under pressure to serve customers quickly and efficiently. The work is relatively safe, but care must be taken to avoid slips, falls, and burns.

Part-time work is more common among food and beverage serving and related workers than among workers in almost any other occupation. Those on part-time schedules include nearly half of all waiters and waitresses, and about 6 out of 10 food counter attendants, compared to almost 1 out of 7 workers throughout the economy. While about half of all bartenders work full time, 36 percent work part time and the remainder work a variable schedule.

The wide range in dining hours creates work opportunities attractive to homemakers, students, and others seeking supplemental income. In fact, nearly 2 out of 3 food counter attendants are between 16 and 19 years old. Many food and beverage serving and related workers work evenings, weekends, and holidays. Some work split shifts—they work for several hours during the middle of the day, take a few hours off in the afternoon, and then return to their jobs for evening hours.

Employment

Food and beverage serving and related workers held 6.5 million jobs in 2000. Combined food preparation and serving workers held about 2.2 million of these jobs; waiters and waitresses, about 2 million; dishwashers, 525,000; dining room and cafeteria attendants and bartender helpers, 431,000; counter attendants, 421,000; bartenders, 387,000; hosts and hostesses, 343,000; and non-restaurant food servers, 205,000.

Restaurants, coffee shops, bars, and other retail eating and drinking places employed the overwhelming majority of food and beverage service workers. Others worked in hotels and other lodging

places, bowling alleys, casinos, country clubs, and other membership organizations.

Jobs are located throughout the country but are typically plentiful in large cities and tourist areas. Vacation resorts offer seasonal employment, and some workers alternate between summer and winter resorts, instead of remaining in one area the entire year.

Training, Other Qualifications, and Advancement

There are no specific educational requirements for food and beverage service jobs. Although many employers prefer to hire high school graduates for waiter and waitress, bartender, and host and hostess positions, completion of high school usually is not required for fast-food workers, counter attendants, and dining room attendants and bartender helpers. For many people, a job as a food and beverage service worker serves as a source of immediate income, rather than a career. Many entrants to these jobs are in their late teens or early twenties and have a high school education or less. Usually, they have little or no work experience. Many are full-time students or homemakers. Food and beverage service jobs are a major source of part-time employment for high school and college students.

Because maintaining a restaurant's image is important to its success, employers emphasize personal qualities. Food and beverage serving and related workers are in close contact with the public, so these workers should be well spoken and have a neat, clean appearance. They should enjoy dealing with all kinds of people and possess a pleasant disposition.

Waiters and waitresses need a good memory to avoid confusing customers' orders and to recall faces, names, and preferences of frequent patrons. These workers should also be good at arithmetic so they can total bills without the assistance of a calculator or cash register if necessary. In restaurants specializing in foreign foods, knowledge of a foreign language is helpful. Prior experience waiting on tables is preferred by restaurants and hotels that have rigid table service standards. Jobs at these establishments often have higher earnings, but they may also have higher educational requirements than less demanding establishments.

Usually, bartenders must be at least 21 years of age, but employers prefer to hire people who are 25 or older. Bartenders should be familiar with State and local laws concerning the sale of alcoholic beverages.

Most food and beverage serving and related workers pick up their skills on the job by observing and working with more experienced workers. Some employers, particularly those in fast-food restaurants, use self-instruction programs with audiovisual presentations and instructional booklets to teach new employees food preparation and service skills. Some public and private vocational schools, restaurant associations, and large restaurant chains provide classroom training in a generalized food service curriculum.

Some bartenders acquire their skills by attending a bartending or vocational and technical school. These programs often include instruction on State and local laws and regulations, cocktail recipes, attire and conduct, and stocking a bar. Some of these schools help their graduates find jobs. Although few employers require any level of educational attainment, some specialized training is usually needed including food handling training and legal issues including serving alcoholic beverages and tobacco. Employers are more likely to hire and promote based on people skills and personal qualities rather than education. Food and beverage service workers are in close contact with the public, so they should present themselves well and have a neat and clean appearance.

Due to the relatively small size of most food-serving establishments, opportunities for promotion are limited. After gaining some experience, some dining room and cafeteria attendants and bartender

helpers are able to advance to waiter, waitress, or bartender jobs. For waiters, waitresses, and bartenders, advancement usually is limited to finding a job in a more expensive restaurant or bar where prospects for tip earnings are better. A few bartenders open their own businesses. Some hosts and hostesses and waiters and waitresses advance to supervisory jobs, such as maitre d'hôtel, dining room supervisor, or restaurant manager. In larger restaurant chains, food and beverage service workers who excel at their work often are invited to enter the company's formal management training program. (For more information, see the *Handbook* statement on food service managers.)

Job Outlook

Job openings are expected to be abundant for food and beverage serving and related workers. Overall employment of these workers is expected to grow about as fast as the average for all occupations over the 2000-10 period, stemming from increases in population, personal incomes, and leisure time. While employment growth will produce many new jobs, the overwhelming majority of openings will arise from the need to replace the high proportion of workers who leave this occupation each year. There is substantial movement into and out of the occupation because education and training requirements are minimal, and the predominance of part-time jobs is attractive to people seeking a short-term source of income rather than a career. However, keen competition is expected for bartender, waiter and waitress, and other food and beverage service jobs in popular restaurants and fine dining establishments, where potential earnings from tips are greatest.

Projected employment growth between 2000 and 2010 varies by type of job. Employment of combined food preparation and serving workers, which includes fast-food workers, is expected to increase faster than average in response to the continuing fast-paced lifestyle of many Americans and the addition of healthier foods at many fast-food restaurants. Increases in the number of families and the more affluent, 55-and-older population will result in more restaurants that offer table service and more varied menus—leading to fast as average growth for waiters and waitresses and hosts and hostesses. Average employment growth is projected for bartenders as drinking of alcoholic beverages outside the home—particularly cocktails—continues among after-work “happy hour” groups and weekend patrons. A decline is expected in the employment of dining room attendants, as waiters and waitresses increasingly assume their duties.

Earnings

Food and beverage serving and related workers derive their earnings from a combination of hourly wages and customer tips. Earnings vary greatly, depending on the type of job and establishment. For example, fast-food workers and hosts and hostesses usually do not receive tips, so their wage rates may be higher than those of waiters and waitresses and bartenders, who may earn more from tips than from wages. In some restaurants, these workers contribute a portion of their tips to a tip pool, which is distributed among the establishment's other food and beverage serving and related workers and kitchen staff. Tip pools allow workers who normally do not receive tips, such as dining room attendants and dishwashers, to share in the rewards of a well-served meal.

In 2000, median hourly earnings (not including tips) of waiters and waitresses were \$6.42. The middle 50 percent earned between \$5.88 and \$7.26. The lowest 10 percent earned less than \$5.49, and the highest 10 percent earned more than \$10.15 per hour. For most waiters and waitresses, higher earnings are primarily the result of receiving more in tips rather than higher hourly wages. Tips usually average between 10 and 20 percent of guests' checks, so

waiters and waitresses working in busy, expensive restaurants earn the most.

Bartenders had median hourly earnings (not including tips) of \$6.86 in 2000. The middle 50 percent earned between \$6.10 and \$8.44. The lowest 10 percent earned less than \$5.59, and the highest 10 percent earned more than \$11.14 an hour. Like waiters and waitresses, bartenders employed in public bars may receive more than half of their earnings as tips. Service bartenders often are paid higher hourly wages to offset their lower tip earnings.

Median hourly earnings (not including tips) of dining room and cafeteria attendants and bartender helpers were \$6.53 in 2000. The middle 50 percent earned between \$5.97 and \$7.62. The lowest 10 percent earned less than \$5.54, and the highest 10 percent earned more than \$9.26 an hour. Most received over half of their earnings as wages; the rest of their income was a share of the proceeds from tip pools.

Median hourly earnings of hosts and hostesses were \$6.95 in 2000. The middle 50 percent earned between \$6.18 and \$8.11. The lowest 10 percent earned less than \$5.65, and the highest 10 percent earned more than \$9.59 an hour. The majority of their earnings are received from wages. In some cases, wages were supplemented by a share of the proceeds from tip pools.

Median hourly earnings of counter attendants in cafeterias, food concessions, and coffee shops (not including tips) were \$6.72 in 2000. The middle 50 percent earned between \$6.07 and \$8.05 an hour. The lowest 10 percent earned less than \$5.59, and the highest 10 percent earned more than \$9.92 an hour.

Median hourly earnings of combined food preparation and serving workers, including fast food, were \$6.52 in 2000. The middle 50 percent earned between \$5.92 and \$7.52. The lowest 10 percent earned less than \$5.51, and the highest 10 percent earned more than \$8.64 an hour. Although some counter attendants receive part of their earnings as tips, fast-food workers usually do not.

Median hourly earnings of dishwashers were \$6.69 in 2000. The middle 50 percent earned between \$6.05 and \$7.86. The lowest 10 percent earned less than \$5.58, and the highest 10 percent earned more than \$8.81 an hour. Generally these are part-time positions receiving very low wages due to the nature of the work and automation.

Median hourly earnings of nonrestaurant food servers were \$7.07 in 2000.

In establishments covered by Federal law, most workers beginning at the minimum wage earned \$5.15 an hour in 2000. However, various minimum wage exceptions apply under specific circumstances to disabled workers, full-time students, youth under age 20 in their first 90 days of employment, tipped employees, and student-learners. Tipped employees are those who customarily and regularly receive more than \$30 a month in tips. The employer may consider tips as part of wages, but the employer must pay at least \$2.13 an hour in direct wages. Employers also are permitted to deduct from wages the cost, or fair value, of any meals or lodging provided. However, many employers provide free meals and furnish uniforms. Food and beverage service workers who work full time often receive typical benefits, while part-time workers usually do not.

In some large restaurants and hotels, food and beverage serving and related workers belong to unions—principally the Hotel Employees and Restaurant Employees International Union and the Service Employees International Union.

Related Occupations

Other workers whose jobs involve serving customers and helping them enjoy themselves include flight attendants, tour and travel guides, and gaming services workers.

Sources of Additional Information

Information about job opportunities may be obtained from local employers and local offices of the State employment service.

A guide to careers in restaurants, a list of 2- and 4-year colleges that have food service programs, and information on scholarships to those programs is available from:

► National Restaurant Association, 1200 17th St. NW., Washington, DC 20036-3097. Internet: <http://www.restaurant.org>

For general information on hospitality careers, contact:

► International Council on Hotel, Restaurant, and Institutional Education, 3205 Skipwith Rd., Richmond, VA 23294-4442. Internet: <http://www.chrie.org>

Gaming Services Occupations

(O*NET 39-1011.00, 39-1012.00, 39-3011.00, 39-3012.00, 39-3019.99, 39-3099.99)

Significant Points

- Usually there are no minimum educational requirements; each casino establishes its own requirements for education, training, and experience.
- Workers need a license issued by a regulatory agency, such as a casino control board or commission; licensure requires proof of residency in the State in which gaming workers are employed.
- Job prospects are best for those with a degree or certification in gaming or a hospitality-related field, previous casino gaming training or experience, and strong interpersonal and customer service skills.

Nature of the Work

Legalized gambling in the United States today includes casino gaming, State lotteries, parimutuel wagering on contests such as horseracing, and charitable gaming. Gaming, the playing of games of chance, is a multibillion-dollar industry that is responsible for the creation of a number of unique service occupations.

The majority of all gaming services workers are employed in casinos. Their duties and titles may vary from one establishment to another. Despite differences in job title and task, however, workers perform many of the same basic functions in all casinos. Some positions are associated with oversight and direction—supervision, surveillance, and investigation—while others involve working with the games or patrons themselves, performing such activities as tending slot machines, handling money, writing and running tickets, and dealing cards.

Like nearly every business establishment, casinos have workers who direct and oversee day-to-day operations. *Gaming supervisors* oversee the gaming operations and personnel in an assigned area. They circulate among the tables and games and observe the operations to ensure that all of the stations and games are covered for each shift. It also is not uncommon for gaming supervisors to explain and interpret the operating rules of the house to the patrons who may have difficulty understanding the rules. Gaming supervisors also may plan and organize activities to create a friendly atmosphere for the guests staying in their hotels or casino hotels; and, periodically, they address and adjust service complaints.

Some gaming occupations demand specially acquired skills—dealing blackjack, for example—that are unique to casino work. Others require skills common to most businesses, such as the ability to conduct financial transactions. In both capacities, the workers



Most gaming services workers are employed in casinos.

in these jobs interact directly with patrons in attending to slot machines, making change, cashing or selling tokens and coins, writing and running for other games, and dealing cards at table games. Part of their responsibility is to make those interactions enjoyable.

Slot key persons, also called slot attendants, slot technicians or slot key persons, coordinate and supervise the slot department and its workers. Their duties include verifying and handling payoff winnings to patrons, resetting slot machines after completing the payoff, and refilling machines with money. Slot key persons must be familiar with a variety of slot machines and be able to make minor repairs and adjustments to the machines as needed. If major repairs are required, slot key persons determine whether the slot machine should be removed from the floor. Working the floor as front-line personnel, they enforce safety rules and report hazards.

Gaming and sportsbook writers and runners assist in the operations of games such as bingo and keno. They scan tickets presented by patrons and calculate and distribute winnings. Some writers and runners operate the equipment that randomly selects the numbers. Others may announce numbers selected, pick up tickets from patrons, collect bets, or receive, verify, and record patrons' cash wagers.

Gaming dealers operate table games such as craps, blackjack, and roulette. Standing or sitting behind the table, dealers provide dice, dispense cards to players, or run the equipment. Some dealers also monitor the patrons for infractions of casino rules. Gaming dealers must be skilled in customer service and in executing their game. Dealers determine winners, calculate and pay winning bets, and collect losing bets. Because of the fast-paced work environment, most gaming dealers are competent in at least two games—usually blackjack and craps.

Working Conditions

The atmosphere in casinos is generally fun-filled and often considered glamorous. However, casino work can also be physically demanding. Most occupations require that workers stand for long periods; some require the lifting of heavy items. The “glamorous” atmosphere exposes casino workers to certain hazards, such as cigarette, cigar, and pipe smoke. Noise from slot machines, gaming tables, and talking workers and patrons may be distracting to some workers, although workers wear protective headgear in areas where loud machinery is used to count money.

Most casinos are open 24 hours a day and offer three staggered shifts.

Employment

Gaming services' occupations held 167,000 jobs in 2000. Employment by occupational specialty was distributed as follows:

Gaming dealers	88,000
Gaming supervisors	31,000
Slot key persons	14,000
Gaming and sports book writers and runners	12,000
All other gaming service workers	21,000

The majority are found in the hotel and amusement and recreation services industries. Gaming services workers are employed in land-based or riverboat casinos in 11 States—Colorado, Illinois, Indiana, Iowa, Louisiana, Michigan, Mississippi, Missouri, Nevada, New Jersey, and South Dakota. The largest number works in land-based casinos in Nevada, and the second-largest group works in similar establishments in New Jersey. Mississippi, which boasts the greatest number of riverboat casinos in operation, employs the most workers in that venue. In addition, there are 27 States with Indian casinos. Legal lotteries are held in 37 States and the District of Columbia, and parimutuel wagering is legal in 40 States. Forty-six States and the District of Columbia also allow charitable gaming.

For most workers, gaming licensure requires proof of residency in the State in which gaming workers are employed. But some gaming services workers do not limit themselves to one State, or even one country. Some workers find jobs on the small number of casinos located on luxury cruise liners, traveling the world while living and working aboard.

Training, Other Qualifications, and Advancement

Usually, there are no minimum educational requirements for entry-level gaming workers, although most employers prefer a high school diploma or GED. However, entry-level gaming services workers are required to have a license issued by a regulatory agency, such as a casino control board or commission. Applicants for a license must provide photo identification, proof of residency in the State in which they anticipate working, and pay a fee. Age requirements vary by State. The licensing application process also includes a background investigation.

In addition to a license, gaming services workers need superior customer service skills. Casino gaming workers provide entertainment and hospitality to patrons, and the quality of their service contributes to an establishment's success or failure. Therefore, gaming workers need good communication skills, an outgoing personality, and the ability to maintain their composure even when dealing with angry or demanding patrons. Personal integrity also is important because workers handle large amounts of money.

Each casino establishes its own requirements for education, training, and experience. Almost all casinos provide some in-house training in addition to requiring certification. The type and quantity of classes needed may vary.

Many institutions of higher learning offer training classes toward certification in gaming, as well as offering an associate, bachelor's, or master's degree in a hospitality-related field such as hospitality management, hospitality administration, or hotel management. Some schools offer training in games, gaming supervision, slot attendant and slot repair work, slot department management, and surveillance and security.

Gaming services workers who manage money should have some experience handling cash or using calculators or adding machines. For such positions, most casinos administer a math test to assess an applicant's level of competency.

Most casino supervisory staff have an associate or bachelor's degree. Supervisors who do not have a degree usually substitute hands-on experience for formal education. Regardless of their educational background, however, most supervisors gain experience in other gaming occupations before moving into supervisory positions because knowledge of games and casino operations is essential for these workers. Gaming supervisors must have leadership qualities and good communication skills to supervise employees effectively and to deal with patrons in a way that encourages return visits.

Slot key persons do not need to meet formal educational requirements to enter the occupation, but completion of slot attendant or slot technician training is helpful. As with most other gaming workers, slot key persons receive on-the-job training during the first several weeks of employment. Most slot key positions are entry level, so a desire to learn is important. Slot key persons need good communication skills and an ability to remain calm, even when dealing with angry or demanding patrons. Personal integrity also is important because these workers handle large sums of money.

Gaming and sportsbook writers and runners must have at least a high school diploma or GED. Most of these workers receive on-the-job training. Because gaming and sportsbook writers and runners work closely with patrons, they need excellent customer service skills.

Nearly all gaming dealers are certified. Certification is available through 2- or 4-year programs in gaming or a hospitality-related field. Experienced dealers, who often are able to attract new or return business, have the best job prospects. Dealers with more experience are placed at the "high roller" tables.

Advancement opportunities in casino gaming depend less on workers' previous casino duties and titles than on their ability and eagerness to learn new jobs. For example, an entry-level gaming worker eventually might advance to become a dealer or card room manager or to assume some other supervisory position.

Job Outlook

Employment in gaming services occupations is projected to grow faster than the average for all occupations through 2010. As a direct result of increasing demand for additional table games in gaming establishments, the most rapid growth is expected among gaming dealers. Job prospects in gaming services occupations are best for those with a degree or certification in gaming or a hospitality-related field, previous casino gaming training or experience, and strong interpersonal and customer service skills. In addition to job openings arising from employment growth, opportunities will result from the need to replace workers transferring to other occupations or leaving the labor force.

Gaming has increased, reflecting growth in the population and in disposable income. More domestic and international competition for gaming patrons, and higher expectations among gaming patrons for customer service, should result in more jobs for gaming services workers. Job growth is expected in established gaming areas such as Las Vegas, Nevada, and Atlantic City, New Jersey, and in other States and areas that may legalize gaming in the coming years, including the development of more gaming establishments on Indian tribal lands.

Earnings

Wage earnings for gaming services workers vary according to occupation, level of experience, training, location, and size of the gaming establishment. The following tabulation shows the range of median earnings for various gaming services occupations in 2000:

Gaming supervisors	\$37,900
Slot key persons	21,620
Gaming and sports book writers and runners	17,100
Gaming dealers	13,330

Related Occupations

Many other occupations provide hospitality and customer service. Some examples of related occupations are security guards and gaming surveillance officers, recreation and fitness workers, sales worker supervisors, cashiers, gaming change persons and booth cashiers, retail salespersons, gaming cage workers, and tellers.

Sources of Additional Information

For additional information on careers in gaming, visit your public library and your State gaming regulatory agency or casino control commission.

Information on careers in gaming also is available from:

► American Gaming Association, 555 13th St. NW., Suite 1010 East, Washington, DC 20004. Internet: <http://www.americangaming.org>

Grounds Maintenance Workers

(O*NET 37-1012.01, 37-1012.02, 37-3011.00, 37-3012.00, 37-3013.00)

Significant Points

- Opportunities, especially for seasonal or part-time work, should be excellent due to significant job turnover.
- Many beginning jobs have low earnings and are physically demanding.
- Most workers learn through short-term on-the-job training.

Nature of the Work

Attractively designed, healthy, and well-maintained lawns, gardens, and grounds create a positive first impression, establish a peaceful mood, and increase property values. Grounds maintenance workers perform the variety of tasks necessary to achieve a pleasant and functional outdoor environment. They also care for indoor gardens and plantings in commercial and public facilities, such as malls, hotels, and botanical gardens.

The duties of *landscaping workers* and *groundskeeping workers* are similar, and often overlap. Landscaping workers physically install and maintain landscaped areas. They grade property, install lighting or sprinkler systems, and build walkways, terraces, patios, decks, and fountains. In addition to initially transporting and planting new vegetation, they also transplant, mulch, fertilize, and water flowering plants, trees, and shrubs, and mow and water lawns. A growing number of residential and commercial clients, such as managers of office buildings, shopping malls, multiunit residential buildings, and hotels and motels, favor full-service landscape maintenance. Landscaping workers perform a range of duties for such clients on a regular basis during the growing season, including mowing, edging, trimming, fertilizing, dethatching, and mulching.

Groundskeeping workers, also called *groundskeepers*, maintain a variety of facilities, including athletic fields, golf courses, cemeteries, university campuses, and parks. In addition to caring for sod, plants, and trees, they also rake and mulch leaves, clear snow from walkways and parking lots, and use irrigation methods to adjust the amount of water consumption and prevent waste. They see to the proper upkeep and repair of sidewalks, parking lots, groundskeeping equipment, pools, fountains, fences, planters, and benches.

Groundskeeping workers who care for athletic fields keep natural and artificial turf fields in top condition and mark out boundaries and paint turf with team logos and names before events. They

must make sure that the underlying soil on natural turf fields has the required composition to allow proper drainage and to support the appropriate grasses used on the field. They regularly mow, water, fertilize, and aerate the fields. Groundskeeping workers also vacuum and disinfect synthetic turf after use in order to prevent growth of harmful bacteria, and periodically remove the turf and replace the cushioning pad.

Workers who maintain golf courses are called *greenskeepers*. Greenskeepers do many of the same things that other groundskeepers do. In addition, greenskeepers periodically relocate the holes on putting greens to eliminate uneven wear of the turf and to add interest and challenge to the game. Greenskeepers also keep canopies, benches, ball washers, and tee markers repaired and freshly painted.

Some groundskeeping workers specialize in caring for cemeteries and memorial gardens. They dig graves to specified depths, generally using a backhoe. They may place concrete slabs on the bottom and around the sides of the grave to line it for greater support. When preparing a site for the burial ceremony, they position the casket-lowering device over the grave, cover the immediate area with an artificial grass carpet, erect a canopy, and arrange folding chairs to accommodate mourners. They regularly mow grass, apply fertilizers and other chemicals, prune shrubs and trees, plant flowers, and remove debris from graves. They also must periodically build the ground up around new gravesites to compensate for settling.

Groundskeeping workers in parks and recreation facilities care for lawns, trees, and shrubs, maintain athletic fields and playgrounds, clean buildings, and keep parking lots, picnic areas, and other public spaces free of litter. They also may remove snow and ice from roads and walkways, erect and dismantle snow fences, and maintain swimming pools. These workers inspect buildings and equipment, make needed repairs, and keep everything freshly painted.

Landscaping and groundskeeping workers use handtools such as shovels, rakes, pruning and regular saws, hedge and brush trimmers, and axes, as well as power lawnmowers, chain saws, snowblowers, and electric clippers. Some use equipment such as tractors and twin-axle vehicles. Landscaping and groundskeeping workers at parks, schools, cemeteries, and golf courses may use sod cutters to harvest sod that will be replanted elsewhere.

Pesticide handlers, sprayers, and applicators, *vegetation*, mix or apply pesticides, herbicides, fungicides, or insecticides through sprays, dusts, vapors, soil incorporation, or chemical application on trees, shrubs, lawns, or botanical crops. Those working for chemical lawn service firms are more specialized. They inspect lawns for problems



Grounds maintenance workers transport and plant potted plants and shrubs.

and apply fertilizers, herbicides, pesticides, and other chemicals to stimulate growth and prevent or control weed, disease, or insect infestation, as well as practice integrated pest management techniques.

Tree trimmers and pruners cut away dead or excess branches from trees or shrubs to maintain rights-of-way for roads, sidewalks, or utilities, or to improve the appearance, health, and value of trees. Tree trimmers also may fill cavities in trees to promote healing and prevent deterioration. Workers who specialize in pruning trim and shape ornamental trees and shrubs for private residences, golf courses, or other institutional grounds. Tree trimmers and pruners use hand-saws, pruning hooks, shears, and clippers. When trimming near powerlines, they usually use truck-mounted lifts and power pruners.

Working Conditions

Many of the jobs for grounds maintenance workers are seasonal, meaning that they are in demand mainly in the spring, summer, and fall when most planting, mowing and trimming, and cleanup is necessary. The work, most of which is performed outdoors in all kinds of weather, can be physically demanding and repetitive, involving much bending, lifting, and shoveling. Workers in landscaping and groundskeeping may be under pressure to get the job completed, especially when preparing for scheduled events such as athletic competitions or burials.

Those who work with pesticides, fertilizers, and other chemicals, as well as potentially dangerous equipment and tools such as power lawnmowers, chain saws, and power clippers, must exercise safety precautions. Workers who use motorized equipment must take care to protect themselves against hearing damage.

Employment

Grounds maintenance workers held about 1.1 million jobs in 2000. Employment was distributed as follows:

Landscaping and groundskeeping workers	894,000
First-line supervisors/managers of landscaping, lawn service, and groundskeeping workers	159,000
Tree trimmers and pruners	52,000
Pesticide handlers, sprayers, and applicators, vegetation	27,000

About 42 percent of wage and salary workers in grounds maintenance were employed in companies providing landscape and horticultural services. Others worked for firms operating and building real estate, amusement and recreation facilities such as golf courses and racetracks, and retail nurseries and garden stores. Some were employed by local governments, installing and maintaining landscaping for parks, schools, hospitals, and other public facilities.

More than 1 out of every 6 grounds maintenance workers were self-employed, providing landscape maintenance directly to customers on a contract basis. About 1 of every 7 worked part time; many of these were of school age.

Training, Other Qualifications, and Advancement

There usually are no minimum educational requirements for entry-level positions in grounds maintenance. In 2000, most workers had a high school education or less, although a diploma is necessary for some jobs. Short-term on-the-job training usually is sufficient to teach new hires how to operate equipment such as mowers, trimmers, leafblowers, and small tractors, and to follow correct safety procedures. Entry-level workers must be able to follow directions and learn proper planting procedures. If driving is an essential part of a job, employers look for applicants with a good driving record and some experience driving a truck. Workers who deal directly with customers must get along well with people. Employers also look for responsible, self-motivated individuals, because grounds maintenance workers often work with little supervision.

Laborers who demonstrate a willingness to work hard and quickly, have good communication skills, and take an interest in the business may advance to crew leader or other supervisory positions. Advancement or entry into positions such as grounds manager or landscape contractor usually requires some formal education beyond high school, and several years of progressively more responsible experience.

Most States require certification for workers who apply pesticides. Certification requirements vary, but usually include passing a test on the proper and safe use and disposal of insecticides, herbicides, and fungicides. Some States require that landscape contractors be licensed.

The Professional Grounds Management Society (PGMS) offers certification to grounds managers who have a combination of 8 years of experience and formal education beyond high school, and pass an examination covering subjects such as equipment management, personnel management, environmental issues, turf care, ornamentals, and circulatory systems. The PGMS also offers certification to groundskeepers who have a high school diploma or equivalent, plus 2 years of experience in the grounds maintenance field.

The Associated Landscape Contractors of America (ALCA) offers the designations Certified Landscape Professional or Certified Landscape Technician to those who meet established education and experience standards and pass an ALCA examination. The hands-on test for technicians covers areas such as maintenance equipment operation and the installation of plants by reading a plan. A written safety test also is administered.

Some workers with groundskeeping backgrounds may start their own businesses after several years of experience.

Job Outlook

Those interested in grounds maintenance occupations should find plentiful job opportunities in the future. Because of high turnover, a large number of job openings is expected to result from the need to replace workers who transfer to other occupations or leave the labor force. These occupations attract many part-time workers. Some take grounds maintenance jobs to earn money for school or simply to secure an income until they find a better-paying job. Because wages for beginners are low and the work is physically demanding, many employers have difficulty attracting enough workers to fill all openings.

Employment of grounds maintenance workers is expected to grow faster than the average for all occupations through the year 2010, in response to increasing demand for groundskeeping and related services. Expected growth in the construction of commercial and industrial buildings, shopping malls, homes, highways, and recreational facilities should contribute to demand for these workers.

The upkeep and renovation of existing landscaping and grounds are continuing sources of demand for grounds maintenance workers. Owners of many existing buildings and facilities, including colleges and universities, recognize the importance of “curb appeal” and are expected to use grounds maintenance services more extensively to maintain and upgrade their properties. Homeowners also are expected to continue using landscaping services to maintain the beauty and value of their property. As the “echo” boom generation (children of baby boomers) comes of age, the demand for parks, athletic fields, and recreational facilities also can be expected to sustain the demand for grounds maintenance workers.

Job opportunities for nonseasonal work are more numerous in regions with temperate climates, where landscaping and lawn services are required all year. However, opportunities may vary depending on local economic conditions.

Earnings

Median hourly earnings in 2000 of grounds maintenance workers were as follows:

First-line supervisors/managers of landscaping, lawn service, and groundskeeping workers	\$14.70
Tree trimmers and pruners	11.41
Pesticide handlers, sprayers, and applicators, vegetation	11.11
Landscaping and groundskeeping workers	8.80

Median hourly earnings in the industries employing the largest numbers of landscaping and groundskeeping workers in 2000 were as follows:

Local government	\$11.41
Real estate agents and managers	9.05
Subdividers and developers	8.71
Landscape and horticultural services	8.63
Miscellaneous amusement and recreation services	8.34
Real estate operators and lessors	8.18

Related Occupations

Grounds maintenance workers perform most of their work outdoors and have some knowledge of plants and soils. Others whose jobs may require that they work outdoors and are otherwise related are agricultural workers; farmers, ranchers, and agricultural managers; forest, conservation, and logging workers; landscape architects; and biological scientists.

Sources of Additional Information

For career and certification information on tree trimmers and pruners, contact:

► National Arborist Association, 3 Perimeter Rd., Unit I, Manchester, NH 03103. Internet: <http://www.natlarb.com>

For information on work as a landscaping and groundskeeping worker, contact:

► Professional Lawn Care Association of America, 1000 Johnson Ferry Rd. NE., Suite C-135, Marietta, GA, 30068-2112. Internet: <http://www.plcaa.org>

► Associated Landscape Contractors of America, 150 Elden St., Suite 270, Herndon, VA, 20170.

For information on becoming a licensed pesticide sprayer, contact your State's Department of Agriculture.

Personal and Home Care Aides

(O*NET 39-9021.00)

Significant Points

- Numerous job openings will result from very fast employment growth and high replacement needs.
- Education required for entry-level jobs is generally minimal, but earnings are low.

Nature of the Work

Personal and home care aides help elderly, disabled, and ill persons live in their own homes or in residential care facilities instead of in a health facility. Most work with elderly or disabled clients who need more extensive care than family or friends can provide. Some aides work with families in which a parent is incapacitated and small children need care. Others help discharged hospital patients who have relatively short-term needs. (For information on home health aides, see the statement on nursing, psychiatric, and home health aides, elsewhere in the *Handbook*.)



Personal and home care aides provide housekeeping and routine personal care services.

Personal and home care aides—also called homemakers, caregivers, companions, and personal attendants—provide housekeeping and routine personal care services. They clean clients' houses, do laundry, and change bed linens. Aides may plan meals (including special diets), shop for food, and cook. Aides also may help clients move from bed, bathe, dress, and groom. Some accompany clients outside the home, serving as a guide and companion.

Personal and home care aides also provide instruction and psychological support. They may advise families and patients on such things as nutrition, cleanliness, and household tasks. Aides also may assist in toilet training a severely mentally handicapped child, or just listen to clients talk about their problems.

In home care agencies, it usually is a registered nurse, a physical therapist, or a social worker who assigns specific duties and supervises personal and home care aides. Aides keep records of services performed and of clients' condition and progress. They report changes in the client's condition to the supervisor or case manager. Aides work in cooperation with other healthcare professionals, including registered nurses, therapists, and other medical staff.

Working Conditions

The personal and home care aide's daily routine may vary. Aides may go to the same home every day for months or even years. However, most aides work with a number of different clients, each job lasting a few hours, days, or weeks. Aides often visit four or five clients on the same day.

Surroundings differ from case to case. Some homes are neat and pleasant, while others are untidy or depressing. Some clients are pleasant and cooperative; others are angry, abusive, depressed, or otherwise difficult.

Personal and home care aides generally work on their own, with periodic visits by their supervisor. They receive detailed instructions explaining when to visit clients and what services to perform. Many aides work part time, and weekend hours are common.

Aides are individually responsible for getting to the client's home. They may spend a good portion of the working day traveling from one client to another. They are particularly susceptible to falls inside and outside clients' homes and injuries resulting from all types of overexertion when assisting patients. Mechanical lifting devices that are available in institutional settings are seldom available in patients' homes.

Employment

Personal and home care aides held about 414,000 jobs in 2000. Most aides are employed by social services agencies, home health agencies, or residential care facilities. Self-employed aides have no agency affiliation or supervision, and accept clients, set fees, and arrange work schedules on their own.

Training, Other Qualifications, and Advancement

In some States, this occupation is open to individuals with no formal training. On-the-job training is generally provided. Other States may require formal training, depending on State law. The National Association for Home Care offers national certification for personal and home care aides. Certification is a voluntary demonstration that the individual has met industry standards.

Successful personal and home care aides like to help people and do not mind hard work. They should be responsible, compassionate, emotionally stable, and cheerful. In addition, aides should be tactful, honest, and discreet because they work in private homes. Aides also must be in good health. A physical examination including State-mandated tests, such as those for tuberculosis, may be required.

Advancement for personal and home care aides is limited. In some agencies, workers start out performing homemaker duties, such as cleaning. With experience and training, they may take on personal care duties.

Job Outlook

A large number of job openings are expected for personal and home care aides because of much faster than average employment growth and high replacement needs. Personal and home care aides is expected to be one of the fastest growing occupations through the year 2010.

The number of elderly people is projected to rise substantially. This age group is characterized by mounting health problems requiring some assistance. In addition to the elderly, there will be an increasing reliance on home care for patients of all ages. This trend reflects several developments: efforts to contain costs by moving patients out of hospitals and nursing facilities as quickly as possible; the realization that treatment can be more effective in familiar surroundings rather than clinical surroundings; and the development and improvement of medical technologies for in-home treatment.

In addition to job openings created by the increase in demand for these workers, replacement needs are expected to produce numerous openings. Turnover is high, a reflection of the relatively low skill requirements, low pay, and high emotional demands of the work. For these same reasons, many people are reluctant to seek these jobs. Therefore, persons who are interested in this work

and suited for it should have excellent job opportunities, particularly those with experience or training as personal care, home health, or nursing aides.

Earnings

Median hourly earnings of personal and home care aides were \$7.50 in 2000. The middle 50 percent earned between \$6.43 and \$8.53 an hour. The lowest 10 percent earned less than \$5.74, and the highest 10 percent earned more than \$10.13 an hour. Median hourly earnings in the industries employing the largest numbers of personal and home care aides in 2000 are shown below:

Residential care	\$7.97
Job training and related services	7.85
Nursing and personal care facilities	7.82
Individual and family services	7.75
Home health care services	6.49

Most employers give slight pay increases with experience and added responsibility. Aides usually are paid only for the time worked in the home. They normally are not paid for travel time between jobs. Employers often hire on-call hourly workers and provide no benefits.

Related Occupations

Personal and home care aide is a service occupation combining duties of caregivers and social service workers. Workers in related occupations that involve personal contact to help others include childcare workers; nursing, psychiatric, and home health aides; occupational therapist assistants and aides; and physical therapist assistants and aides.

Sources of Additional Information

General information about training and referrals to State and local agencies about opportunities for personal and home care aides, a list of relevant publications, and information on certification are available from:

► National Association for Home Care, 228 7th St. SE., Washington, DC 20003. Internet: <http://www.nahc.org>

Pest Control Workers

(O*NET 37-2021.00)

Significant Points

- Pesticides used by pest control workers can pose health risks.
- Federal and State laws require licensure through training and examination.
- Job prospects should be favorable for qualified applicants because many people do not find pest control work appealing.

Nature of the Work

Roaches, rats, mice, spiders, termites, fleas, ants, and bees—few people welcome them into their homes or offices. Unwanted creatures that infest households, buildings, or surrounding areas are pests that can pose serious risks to human health and safety. It is a pest control worker's job to eliminate them.

Pest control workers locate, identify, destroy, and repel pests. They use their knowledge of pests' lifestyles and habits, along with an arsenal of pest management techniques—applying chemicals,

setting traps, operating equipment, and even modifying structures—to alleviate pest problems.

The best known method of pest control is pesticide application. Pest control workers use two different types of pesticides—general use and restricted use. General use pesticides are the most widely used and are readily available; in diluted concentrations, they are available to the public. Restricted use pesticides are available only to certified professionals for controlling the most severe infestations. Their registration, labeling, and application are regulated by Federal law, interpreted by the U.S. Environmental Protection Agency (EPA), because of their potential harm to pest control workers, customers, and the environment.

Pesticides are not pest control workers' only tool, however. Pest control workers increasingly use a combination of pest management techniques, known as integrated pest management. One method involves using proper sanitation and creating physical barriers, for pests cannot survive without food and will not infest a building if they cannot enter it. Another method involves using baits, some of which destroy the pests, and others that prevent them from reproducing. Yet another method involves using mechanical devices, such as traps, that do not allow pests to reenter the environment.

Integrated pest management is becoming popular for several reasons. First, pesticides can pose environmental and health risks. Second, some pests are becoming more resistant to pesticides in certain situations. Finally, an integrated pest management plan is more effective in the long term than use of a pesticide alone.

Most pest control workers work in one of three positions—pest control technician, applicator, or supervisor. Position titles vary by State, but the hierarchy—based on training and responsibility required—remains consistent.

Pest control technicians identify problem areas and operate and maintain traps. They assist applicators by carrying supplies, organizing materials, and preparing equipment. In addition, they may make sales presentations on pest control products or services. Technicians are licensed to apply pesticides only under an applicator's supervision.

Certified pest control applicators, sometimes called exterminators, perform the same tasks technicians do. But they also are certified to apply all pesticides, both general use and restricted use, without supervision and are licensed to supervise and train technicians in pesticide use. Within this group of workers are several subspecialties, including termite exterminators and fumigators.

Termite exterminators are applicators who specialize in controlling termites. They use chemicals and modify structures to eliminate termites and prevent reinfestation. To treat infested areas, termite exterminators drill holes and cut openings into buildings to access infestations. To prevent further infestation, they modify foundations and dig holes and trenches around buildings. Some termite exterminators even repair structural damage caused by termites.

Fumigators are applicators who control pests using poisonous gases called fumigants. Fumigators pretreat infested buildings by examining, measuring, and sealing the buildings. Then, using cylinders, hoses, and valves, they fill structures with the proper amount and concentration of fumigant. They also monitor the premises during treatment for leaking gas. To prevent accidental fumigant exposure, fumigators padlock doors and post warning signs.

Pest control supervisors, also known as operators, direct service technicians and certified applicators. Supervisors are licensed to apply pesticides, but they usually are more involved in running the business. Supervisors are responsible for ensuring employee adherence to rules and must resolve problems with regulatory officials. Most States require each pest control establishment to have a supervisor; self-employed business owners usually are supervisors.



Pest control workers may come into contact with dangerous chemicals while treating buildings for pest problems.

Working Conditions

Pest control workers must kneel, bend, reach, and crawl to inspect, modify, and treat structures. They work both indoors and out, in all weather conditions. During warm weather, applicators may be uncomfortable wearing the heavy protective gear—such as respirators, gloves, and goggles—required for working with pesticides.

Almost half of all pest control workers work a 40-hour week, but about a quarter work more hours. Pest control workers often work evenings and weekends, but many work consistent shifts.

There are health risks associated with pesticide use. Various pest control chemicals are toxic and could pose health risks if not used properly. Extensive training required for certification and the use of recommended protective equipment minimizes these health risks, resulting in fewer reported cases of lost work. Because pest control workers travel to visit clients, the potential risk of motor vehicle accidents is another occupational hazard.

Employment

Pest control workers held about 58,000 jobs in 2000; 79 percent of workers were employed in the services to buildings industry. They are concentrated in States with warmer climates. About 14 percent were self-employed.

Training, Other Qualifications, and Advancement

A high school diploma or equivalent is the minimum qualification for most pest control jobs. Although a college degree is not required,

almost half of all pest control workers have either attended college or earned a degree.

Pest control workers must have basic skills in math, chemistry, and writing. Because of the extensive interaction that pest control workers have with their customers, employers prefer to hire people who have good communication and interpersonal skills. In addition, most pest control companies require their employees to have a good driving record. Pest control workers must be in good health because of the physical demands of the job, and they also must be able to withstand extreme conditions—such as the heat of climbing into an attic in the summertime or the chill of sliding into a crawlspace during winter.

Both Federal and State laws regulate pest control workers. These laws require them to be certified through training and examination, for which most pest control firms help their employees prepare. Workers may receive both formal classroom and on-the-job training, but they also must study on their own. Because the pest control industry is constantly changing, workers must attend continuing education classes to maintain their certification.

Requirements for pest control workers vary by State. Pest control workers usually begin their careers as apprentice technicians. Before performing any pest control services, apprentices must attend general training in pesticide safety and use. In addition, they must train in each pest control category in which they wish to practice. Categories may include general pest control, rodent control, termite control, fumigation, and ornamental and turf control.

Training usually involves spending 10 hours in the classroom and 60 hours on the job for each category. After completing the required training, apprentices can provide supervised pest control services. Apprentices have up to 1 year to prepare for and pass the written examinations. Upon successful completion of the exams, the apprentice becomes licensed as a technician.

To be eligible to become applicators, technicians need 1 year of experience, 6 months of which must be as a licensed technician. This requirement is sometimes waived for individuals who have either a college degree in biological sciences or extensive related work experience. To become certified as applicators, technicians must pass an additional set of category exams. Depending on the State, applicators must attend additional classes every 1 to 6 years to be recertified.

Applicators with several years of experience often become supervisors. To qualify as a pest control supervisor, applicators must pass State-administered exams and have experience in the industry, usually a minimum of 2 years. Many supervisors are self-employed, reflecting the relative ease of entry into the field and the growing need for pest control. Therefore, the pest control industry provides a good opportunity for people interested in operating their own business.

Job Outlook

Job prospects should be favorable for qualified applicants because many people do not find pest control work appealing. Employment of pest control workers is expected to grow faster than the average for all occupations through 2010. In addition to job openings arising from employment growth, opportunities will result from workers transferring to other occupations or leaving the labor force.

Demand for pest control workers is projected to increase for a number of reasons. An expanding client base will develop as environmental and health concerns, greater numbers of dual-income households, and improvements in the standard of living convince more people to hire professionals rather than attempt pest control work themselves. In addition, tougher regulations limiting pesticide use will demand more complex integrated pest management strategies. Greater concerns about the effects of pesticide use in

schools has increasingly prompted more school districts to investigate alternative means of pest control, such as integrated pest management. Furthermore, use of some newer materials for insulation around foundations has made many homes more susceptible to pest infestation. Finally, continuing population shifts to the more pest-prone sunbelt States should increase the number of households in need of pest control.

Earnings

The hierarchy of pest control positions also applies to earnings. Pest control supervisors usually earn the most and technicians the least, with earnings of certified applicators falling somewhere in between. Earnings data do not distinguish among job titles, however.

Median hourly earnings of full-time wage and salary pest control workers were \$10.65 in 2000. The middle 50 percent earned between \$8.73 and \$13.58. The lowest 10 percent earned less than \$7.09, and the top 10 percent earned over \$16.95.

Many pest control workers are employed under a wage plus commission system, which rewards workers who do their job well. Some firms offer bonuses to workers who exceed their performance goals.

Related Occupations

Pest control workers visit homes and places of business to provide building services. Other workers who provide services to buildings include building cleaning workers; various construction trades workers, including carpenters and electricians; and heating, air-conditioning, and refrigeration mechanics and installers.

Sources of Additional Information

Private employment agencies and State employment services offices have information about available job opportunities for pest control workers.

For information about the training and certification required in your State, contact your local office of the U.S. Department of Agriculture or your State's Environmental Protection Agency.

Recreation and Fitness Workers

(O*NET 39-9031.00, 39-9032.00)

Significant Points

- Educational requirements for recreation workers range from a high school diploma to a graduate degree, whereas fitness workers usually need certification.
- Competition will remain keen for full-time career positions in recreation; however, job prospects for fitness workers will be more favorable.

Nature of the Work

People spend much of their leisure time participating in a wide variety of organized recreational activities, such as aerobics, arts and crafts, the performing arts, camping, and sports. Recreation and fitness workers plan, organize, and direct these activities in local playgrounds and recreation areas, parks, community centers, health clubs, fitness centers, religious organizations, camps, theme parks, and tourist attractions. Increasingly, recreational and fitness workers also are found in workplaces, where they organize and direct leisure activities and athletic programs for employees of all ages.

Recreation workers hold a variety of positions at different levels of responsibility. *Recreation leaders*, who are responsible for a recreation program's daily operation, primarily organize and direct participants. They may lead and give instruction in dance, drama, crafts,

games, and sports; schedule use of facilities; keep records of equipment use; and ensure that recreation facilities and equipment are used properly. Workers who provide instruction and coach groups in specialties such as art, music, drama, swimming, or tennis may be called *activity specialists*. *Recreation supervisors* oversee recreation leaders and plan, organize, and manage recreational activities to meet the needs of a variety of populations. These workers often serve as liaisons between the director of the park or recreation center and the recreation leaders. Recreation supervisors with more-specialized responsibilities also may direct special activities or events or oversee a major activity, such as aquatics, gymnastics, or performing arts.

Directors of recreation and parks develop and manage comprehensive recreation programs in parks, playgrounds, and other settings. Directors usually serve as technical advisors to State and local recreation and park commissions and may be responsible for recreation and park budgets.

Camp counselors lead and instruct children and teenagers in outdoor-oriented forms of recreation, such as swimming, hiking, horseback riding, and camping. In addition, counselors provide campers with specialized instruction in activities such as archery, boating, music, drama, gymnastics, tennis, and computers. In resident camps, counselors also provide guidance and supervise daily living and general socialization. (Workers in a related occupation, *recreational therapists*, help individuals recover from or adjust to illness, disability, or specific social problems; this occupation is described elsewhere in the *Handbook*.)



Recreation and fitness workers lead and give instruction in various activities such as aerobics, crafts, and drama.

Fitness workers instruct or coach groups or individuals in various exercise activities. Because gyms and health clubs offer a variety of exercise activities such as weightlifting, yoga, aerobics, and karate, fitness workers typically specialize in only a few areas. *Fitness trainers* help clients assess their level of physical fitness and help them set and reach fitness goals. They also demonstrate various exercise activities and help clients improve their techniques. They may keep records of their clients' exercise sessions to analyze their progress towards physical fitness. *Personal trainers* work with clients on a one-on-one basis in either a gym or the client's home. *Aerobics instructors* conduct group exercise sessions that involve aerobic exercise, stretching, and muscle conditioning. Some fitness workers may perform the duties of both aerobics instructors and fitness trainers. *Fitness directors* oversee the operations of a health club or fitness center. Their work involves creating and maintaining programs that meet the needs of the club's members. (Workers in a related occupation—*athletes, coaches, umpires, and related workers*—participate in organized sports; this occupation is described elsewhere in the *Handbook*.)

Working Conditions

Recreation and fitness workers may work in a variety of settings—for example, a health club, cruise ship, woodland recreational park, or a playground in the center of a large urban community. Regardless of setting, most recreation workers spend much of their time outdoors and may work in a variety of weather conditions, whereas most fitness workers spend their time indoors at fitness centers and health clubs. Recreation and fitness directors and supervisors, however, typically spend most of their time in an office, planning programs and special events. Directors and supervisors generally engage in less physical activity than do lower-level recreation and fitness workers. Nevertheless, recreation and fitness workers at all levels risk suffering injuries during physical activities.

Most recreation and fitness workers work about 40 hours a week. People entering this field, especially camp counselors, should expect some night and weekend work and irregular hours. About 3 out of 10 work part time, and many recreation jobs are seasonal.

Employment

Recreation and fitness workers held about 427,000 jobs in 2000, and many additional workers held summer jobs in this occupation. About 63 percent were recreation workers; the rest were fitness trainers and aerobics instructors. Of those with year-round jobs as recreation workers, more than one-third worked in park and recreation departments of municipal and county governments. Nearly 1 in 5 recreation workers worked in membership organizations, such as the Boy or Girl Scouts or Red Cross, or worked for programs run by social service organizations, including senior centers, adult daycare programs, or residential care facilities like halfway houses, group homes, and institutions for delinquent youths. Another 1 out of 10 recreation workers worked for nursing and other personal care facilities.

Almost all fitness trainers and aerobics instructors were employed in physical fitness facilities, health clubs, and fitness centers, mainly within the amusement and recreation services industry or membership organizations. Other employers of recreation and fitness workers included commercial recreation establishments, amusement parks, sports and entertainment centers, wilderness and survival enterprises, tourist attractions, vacation excursion companies, hotels and resorts, summer camps, and apartment complexes. About 26,000 recreation and fitness workers were self-employed; many of these were personal trainers.

The recreation field has an unusually large number of part-time, seasonal, and volunteer jobs. These jobs include summer camp counselors, lifeguards, craft specialists, and after-school and weekend

recreation program leaders. In addition, many teachers and college students accept jobs as recreation and fitness workers when school is not in session. The vast majority of volunteers serve as activity leaders at local day-camp programs, or in youth organizations, camps, nursing homes, hospitals, senior centers, and other settings. Some volunteers serve on local park and recreation boards and commissions. Volunteer experience, part-time work during school, or a summer job can lead to a full-time career as a recreation worker.

Training, Other Qualifications, and Advancement

Educational requirements for recreation workers range from a high school diploma—or sometimes less for many summer jobs—to graduate degrees for some administrative positions in large public recreation systems. Full-time career professional positions usually require a college degree with a major in parks and recreation or leisure studies, but a bachelor's degree in any liberal arts field may be sufficient for some jobs in the private sector. In industrial recreation, or "employee services" as it is more commonly called, companies prefer to hire those with a bachelor's degree in recreation or leisure studies and a background in business administration.

Specialized training or experience in a particular field, such as art, music, drama, or athletics, is an asset for many jobs. Some jobs also require certification. For example, a lifesaving certificate is a prerequisite for teaching or coaching water-related activities. Graduates of associate degree programs in parks and recreation, social work, and other human services disciplines also enter some career recreation positions. High school graduates occasionally enter career positions, but this is not common. Some college students work part time as recreation workers while earning degrees.

A bachelor's degree and experience are preferred for most recreation supervisor jobs and required for most higher level administrator jobs. However, increasing numbers of recreation workers who aspire to administrator positions obtain master's degrees in parks and recreation or related disciplines. Certification in the recreation field also may be helpful for advancement. Also, many persons in other disciplines, including social work, forestry, and resource management, pursue graduate degrees in recreation.

Programs leading to an associate or bachelor's degree in parks and recreation, leisure studies, or related fields are offered at several hundred colleges and universities. Many also offer master's or doctoral degrees in this field. In 2000, 100 bachelor's degree programs in parks and recreation were accredited by the National Recreation and Park Association (NRPA). Accredited programs provide broad exposure to the history, theory, and practice of park and recreation management. Courses offered include community organization; supervision and administration; recreational needs of special populations, such as the elderly or disabled; and supervised fieldwork. Students may specialize in areas such as therapeutic recreation, park management, outdoor recreation, industrial or commercial recreation, or camp management.

Certification in the recreation field is offered by the NRPA National Certification Board. The NRPA, along with its State chapters, offers certification as a Certified Park and Recreation Professional (CPRP) for those with a college degree in recreation, and as a Certified Park and Recreation Associate (CPRA) for those with less than 4 years of college. Other NRPA certifications include Certified Playground Safety Inspector (CPSI) and Aquatic Facility Operator (AFO) Certification. Continuing education is necessary to remain certified.

Generally, fitness trainers and aerobics instructors must obtain a certification in the fitness field to obtain employment. Certification may be offered in various areas of exercise such as personal training, weight training, and aerobics. There are many organizations that offer certification testing in the fitness field, including

the American College of Sports Medicine, American Council on Exercise, and National Strength and Conditioning Association. Certification generally is good for two years, after which workers must become recertified. Recertification is accomplished by attending continuing education classes. Most fitness workers are required to maintain a cardiopulmonary resuscitation (CPR) certification. Some employers also require workers to be certified in first aid.

An increasing number of employers require fitness workers to have a bachelor's degree in fields related to health or fitness, such as exercise science or physical education. Some employers allow workers to substitute a college degree for certification, while others require both a degree and certification. A bachelor's degree (and, in some cases, a master's degree in exercise science, physical education, or a related area), along with experience, usually is required to advance to management positions in a health club or fitness center. Many fitness workers become personal trainers, in addition to their main job in a fitness center or as a full-time job. Some workers go into business for themselves and open up their own fitness centers.

Persons planning recreation and fitness careers should be outgoing, good at motivating people, and sensitive to the needs of others. Excellent health and physical fitness are required due to the physical nature of the job. As in many fields, managerial skills are needed to advance to supervisory or managerial positions. College courses in management, business administration, accounting, and personnel management are helpful for advancement to supervisory or managerial positions.

Job Outlook

Competition will be keen for career positions for recreation workers because this field attracts many applicants and because the number of career positions is limited compared with the numerous lower level seasonal jobs. Opportunities for staff positions should be best for persons with formal training and experience gained in part-time or seasonal recreation jobs. Those with graduate degrees should have the best opportunities for supervisory or administrative positions. Opportunities are expected to be better for fitness trainers and aerobics instructors because of relatively rapid growth in employment. Job openings for both recreation and fitness workers also will stem from the need to replace the large numbers of workers who leave these occupations each year.

The recreation field provides a large number of temporary, seasonal jobs. These positions, which typically are filled by high school or college students, generally do not have formal education requirements and are open to anyone with the desired personal qualities. Employers compete for a share of the vacationing student labor force and, although salaries in recreation often are lower than those in other fields, the nature of the work and the opportunity to work outdoors are attractive to many. Seasonal employment prospects as program directors should be best for applicants with specialized training and certification in certain activities, such as swimming.

Overall employment of recreation and fitness workers is expected to grow faster than the average for all occupations through 2010, as increasing numbers of people spend more time and money on leisure and fitness services. Average employment growth is projected for recreation workers—reflecting growth in local government and civic and social associations, industries that employ about half of all recreation workers. Employment of fitness workers—who are concentrated in the rapidly growing amusement and recreation services industry—is expected to increase much faster than average due to rising interest in personal training, aerobics instruction, and other fitness activities.

Projected job growth stems, in part, from rising demand for recreational and fitness activities for older adults in senior centers,

retirement communities, and other settings. In order to prevent many illnesses, such as heart disease, strokes, and arthritis, the general population has increasingly sought the benefits of exercise and its effects on overall health and well-being. In addition, more workers will be needed to develop and lead activity programs in halfway houses, children's homes, and daycare programs for people with special needs. Recreation and fitness jobs also will continue to increase as more businesses recognize the benefits of recreation and fitness programs and other services such as wellness programs. Job growth also will occur in amusement parks, athletic clubs, camps, sports clinics, and swimming pools.

Earnings

Median hourly earnings of recreation workers who worked full time in 2000 were \$8.24. The middle 50 percent earned between about \$6.75 and \$10.65, while the top 10 percent earned \$14.61 or more. However, earnings of recreation directors and others in supervisory or managerial positions can be substantially higher. Most public and private recreation agencies provide full-time recreation workers with typical benefits; part-time workers receive few, if any, benefits. Hourly earnings in the industries employing the largest number of recreation workers in 2000 were:

Nursing and personal care facilities	\$8.70
Local government, except education and hospitals	8.40
Individual and family services	8.27
Civic and social associations	7.62
Miscellaneous amusement and recreation services	7.46

Median hourly earnings of fitness trainers and aerobics instructors in 2000 were \$10.96. The middle 50 percent earned between \$7.65 and \$17.84, while the top 10 percent earned \$25.98 or more.

In 2000, earnings of these workers in the miscellaneous amusement and recreation services industry, which includes commercial fitness clubs, were \$12.22 an hour; fitness trainers and aerobics instructors in civic and social associations earned \$9.03. Earnings for successful self-employed personal trainers can be much higher.

Related Occupations

Recreation workers must exhibit leadership and sensitivity when dealing with people. Other occupations that require similar personal qualities include counselors, probation officers and correctional treatment specialists, psychologists, recreational therapists, and social workers. Occupations that focus on physical fitness, as do fitness workers, include athletes, coaches, umpires, and related workers.

Sources of Additional Information

For information on jobs in recreation, contact employers such as local government departments of parks and recreation, nursing and personal care facilities, local YMCAs, or the Boy or Girl Scouts.

Ordering information for materials describing careers and academic programs in recreation is available from:

► National Recreation and Park Association, Division of Professional Services, 22377 Belmont Ridge Rd., Ashburn, VA 20148. Internet:

<http://www.activeparks.org>

For information on careers and certification in the fitness field, contact:

► American Council on Exercise, 5820 Oberlin Dr., Suite 102, San Diego, CA 92121-3787. Internet: <http://www.acefitness.org>

► American College of Sports Medicine, P.O. Box 1440, Indianapolis, IN 46206-1440. Internet: <http://www.acsm.org>

► National Strength and Conditioning Association, 1955 North Union Blvd., Colorado Springs, CO 80909. Internet: <http://www.nscf-lift.org>